Figure 1. Summer 1998 GLNPO Zooplankton Sampling Stations

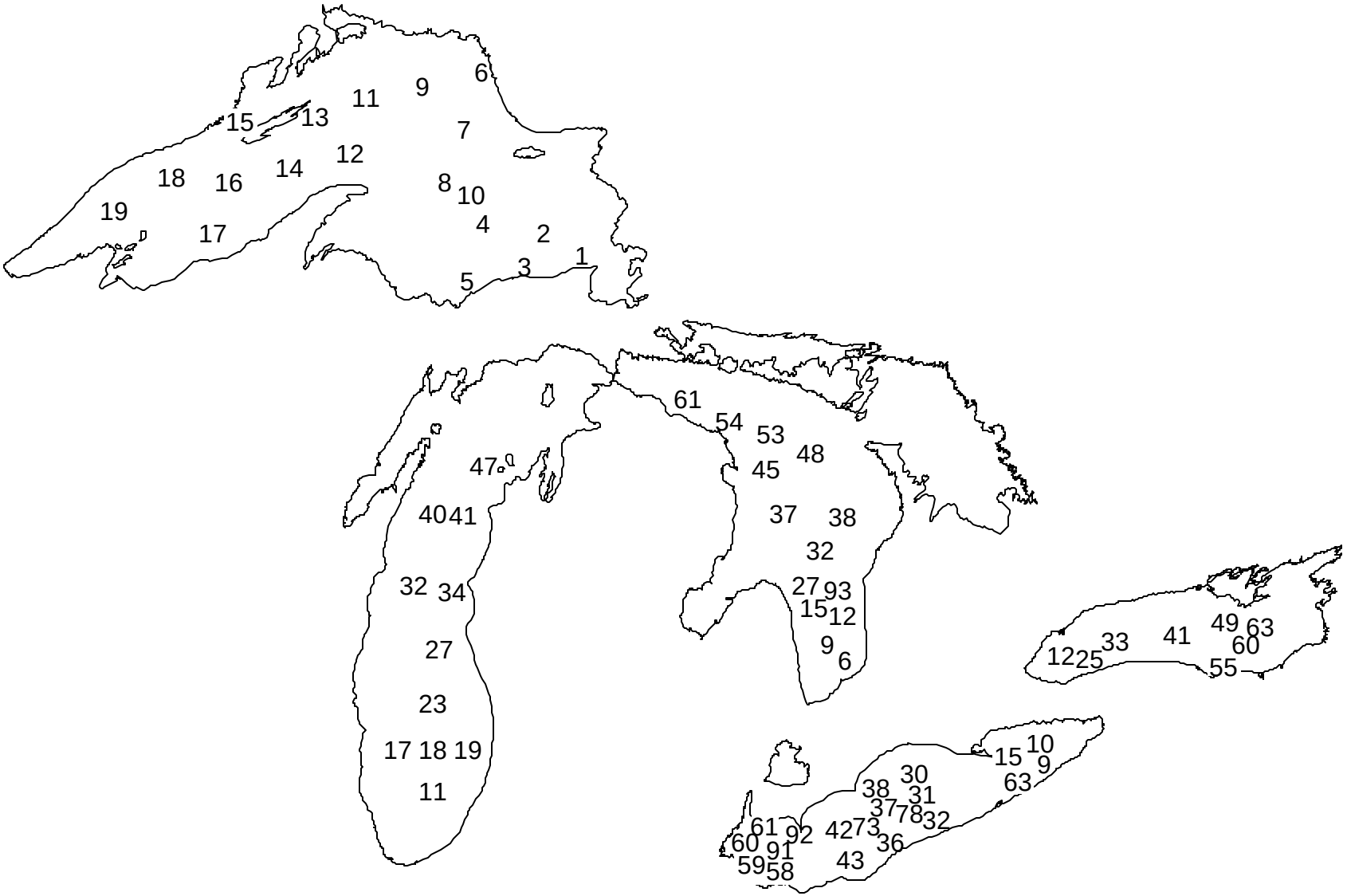

Figure 2. Factor structure of ANOVA analyses. Depth of tow (Depth) and time of day (Time) are the two factors, with species abundance the response variable. Note that sample site is crossed with depth of tow, but nested within time of day.

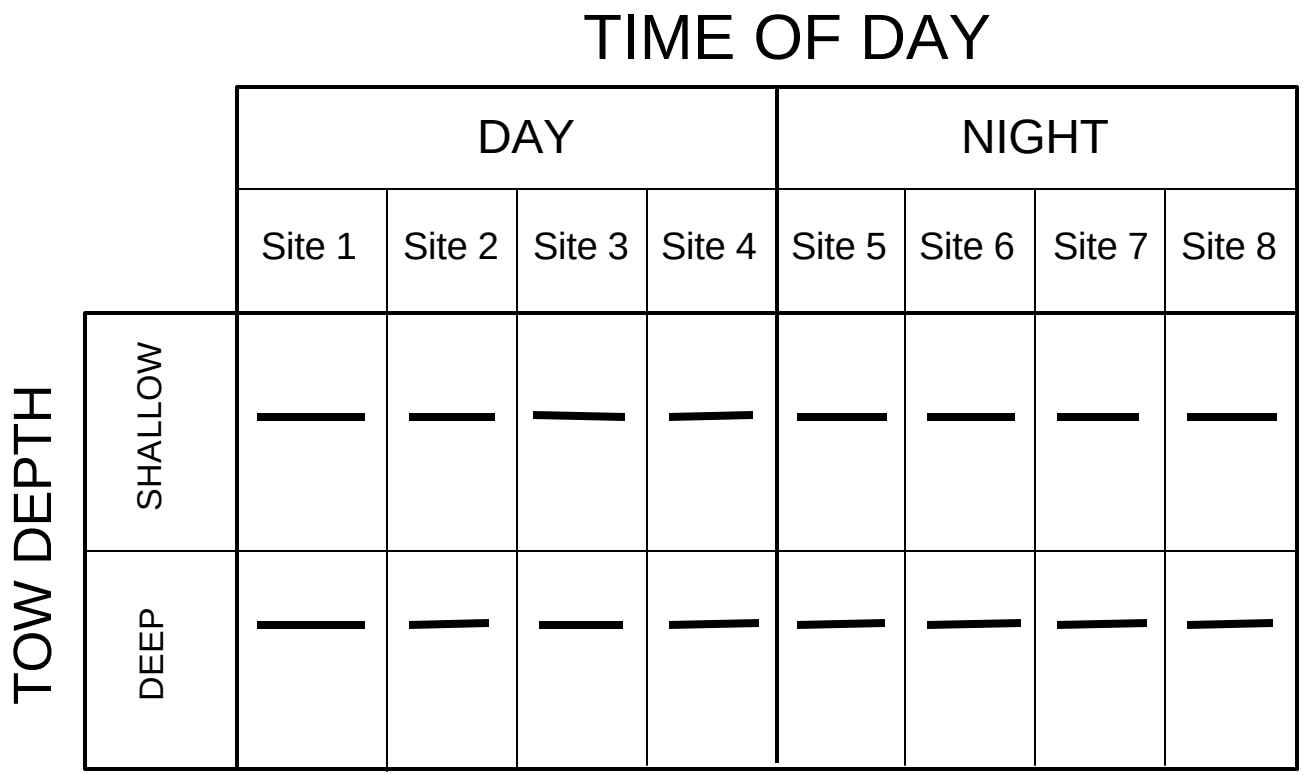

Figure 3. Differences in Zooplankton Abundance and Community Composition Between Shallow and Deep tows, Lake Huron, Summer 1998

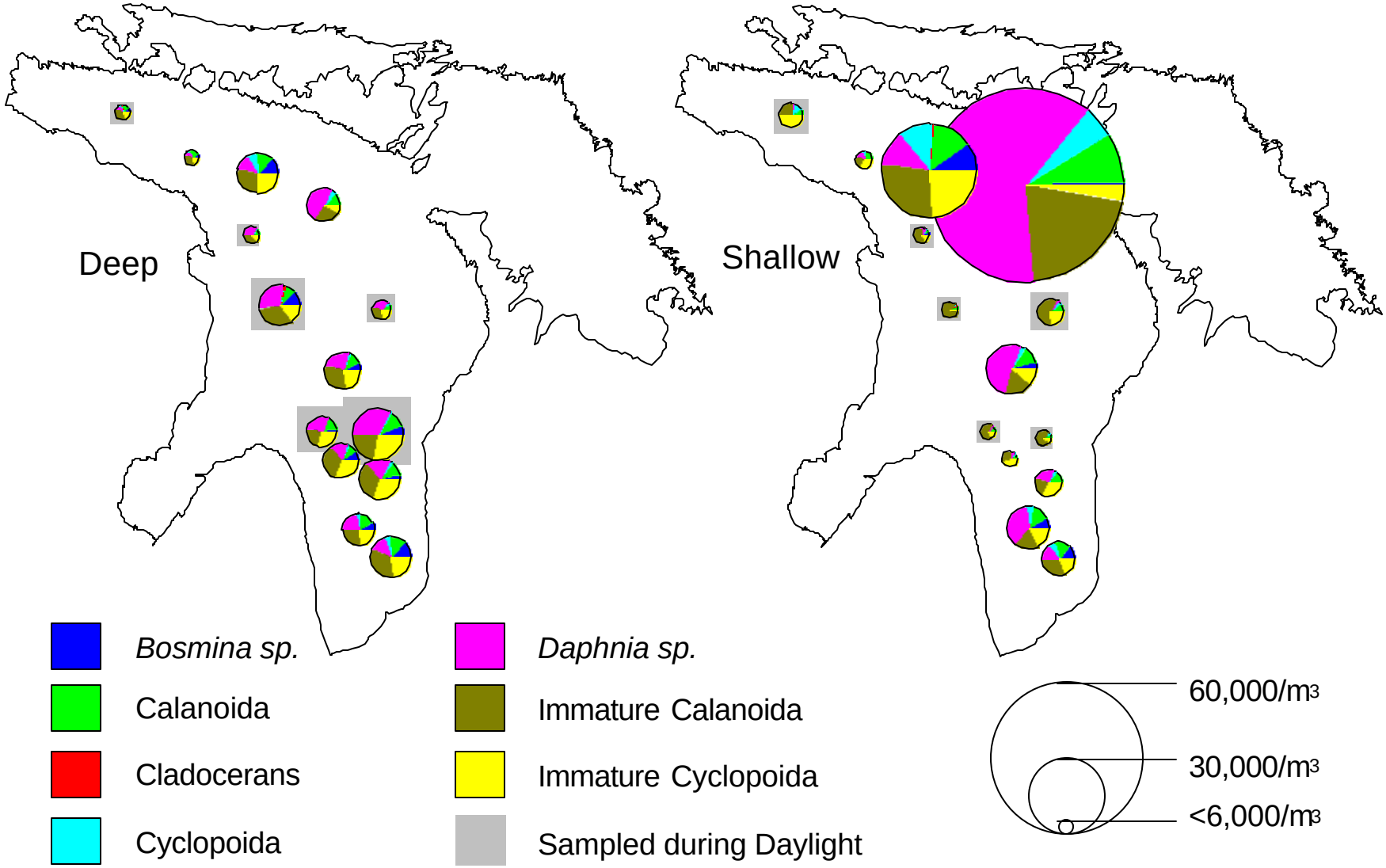

Figure 4. Differences in Zooplankton Abundance and Community Composition Between Shallow and Deep tows, Lake Michigan, Summer 1998

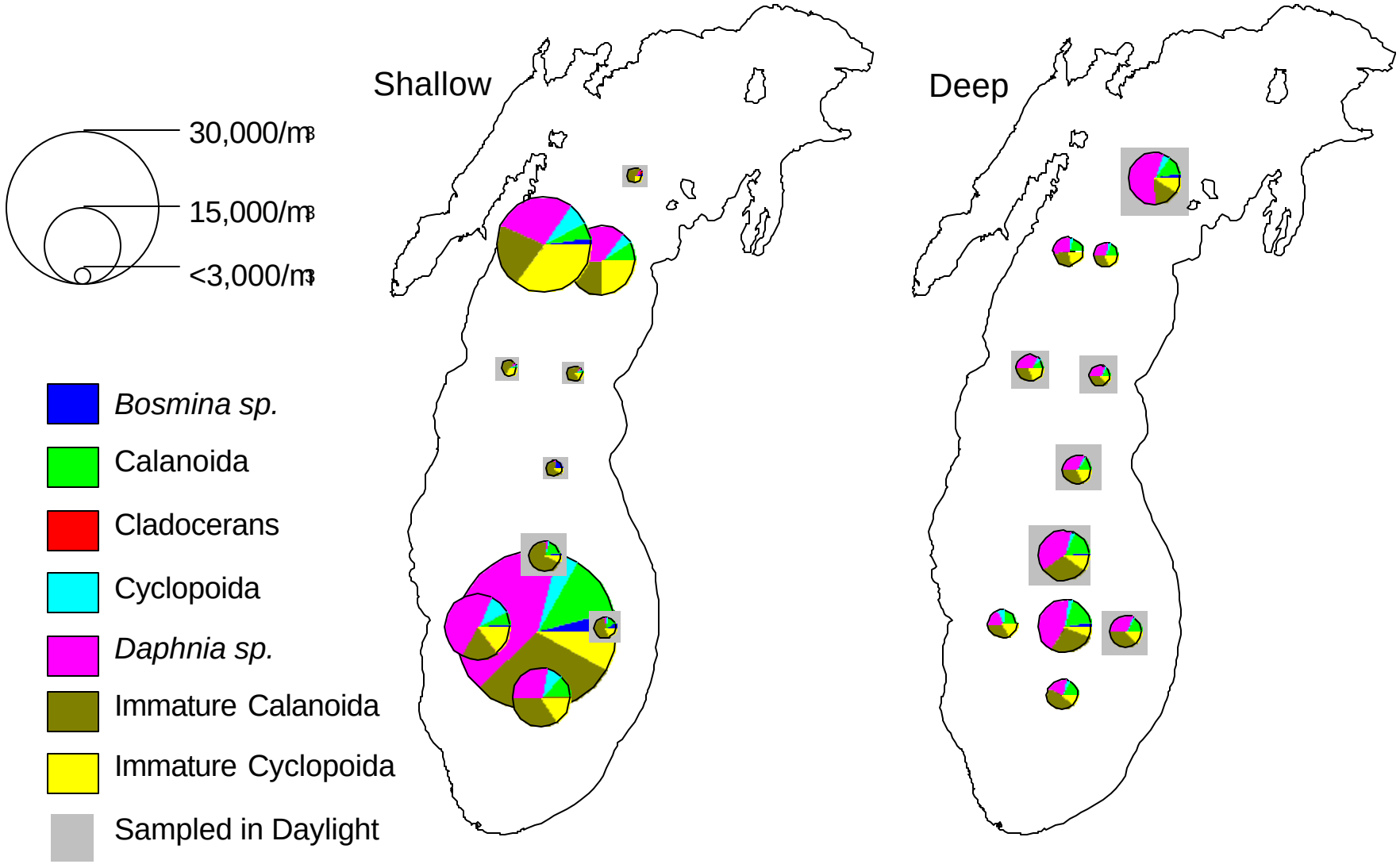

Figure 5. Differences in Zooplankton Abundance and Community Composition Between Shallow and Deep tows, Lake Ontario, Summer 1998

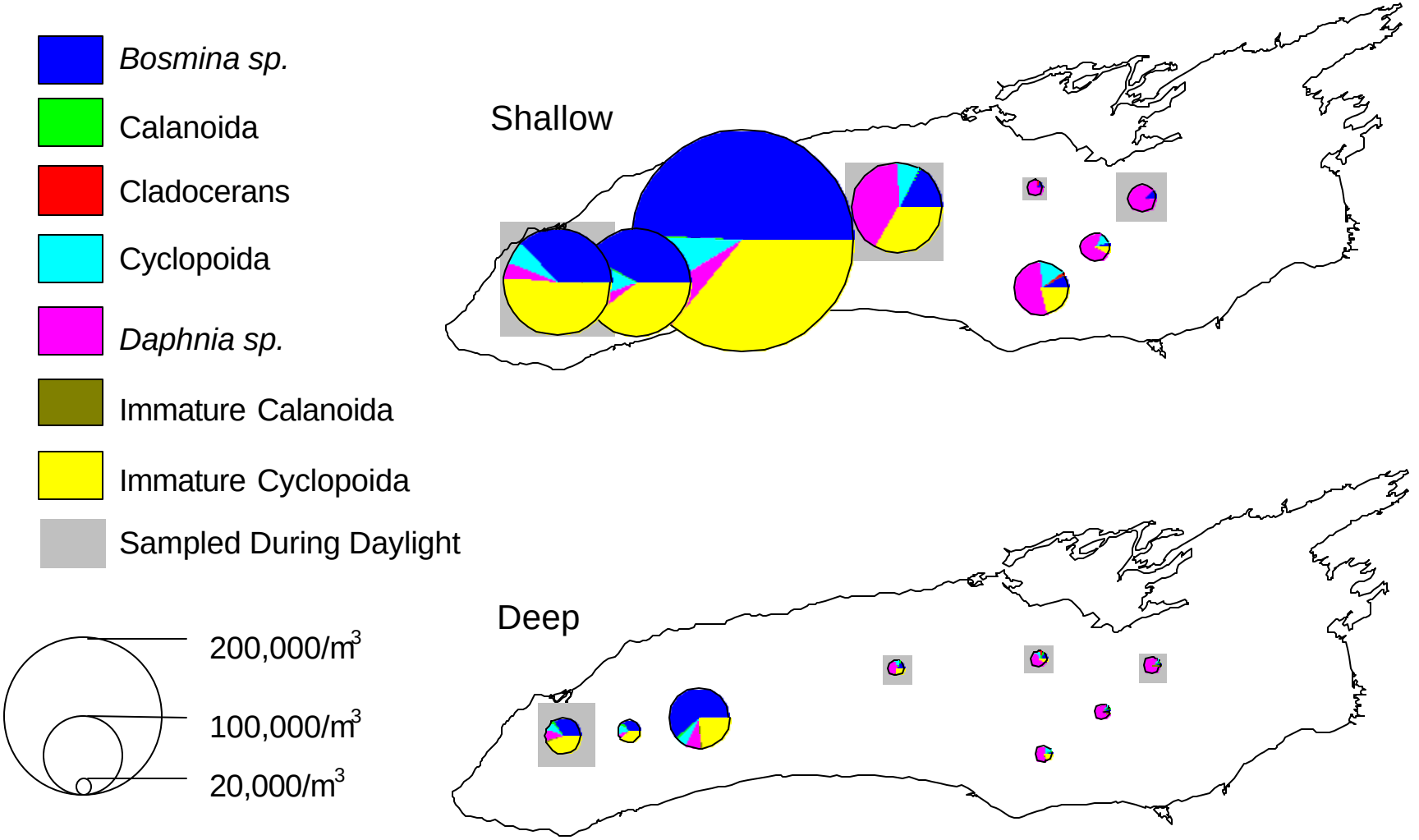

Figure 6. Differences in Zooplankton Abundance and Community Composition Between Shallow and Deep tows, Lake Superior, Summer 1998

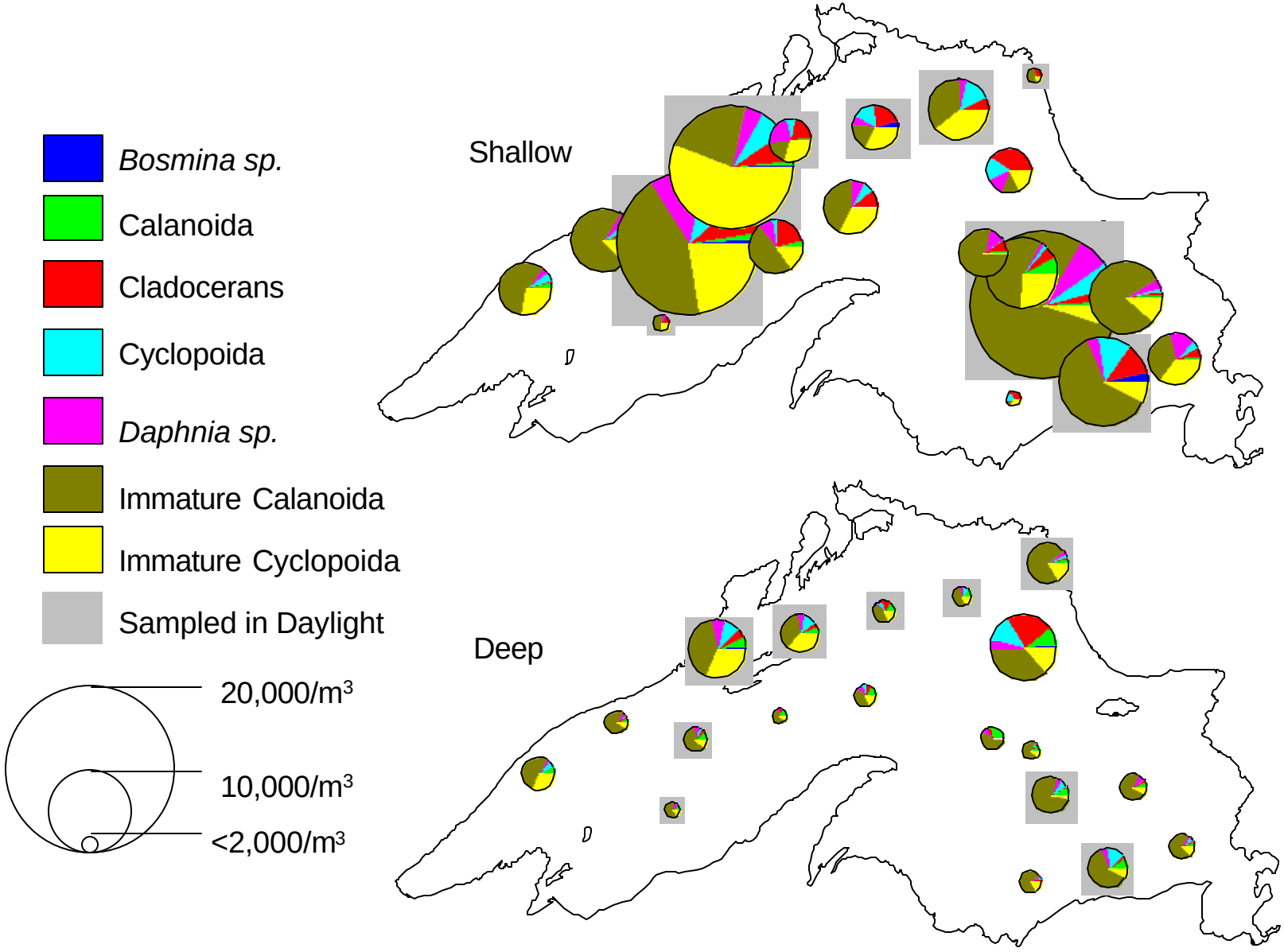

Figure 7. Differences in Zooplankton Abundance and Community Composition Between Shallow and Deep tows, Lake Erie, Summer 1998

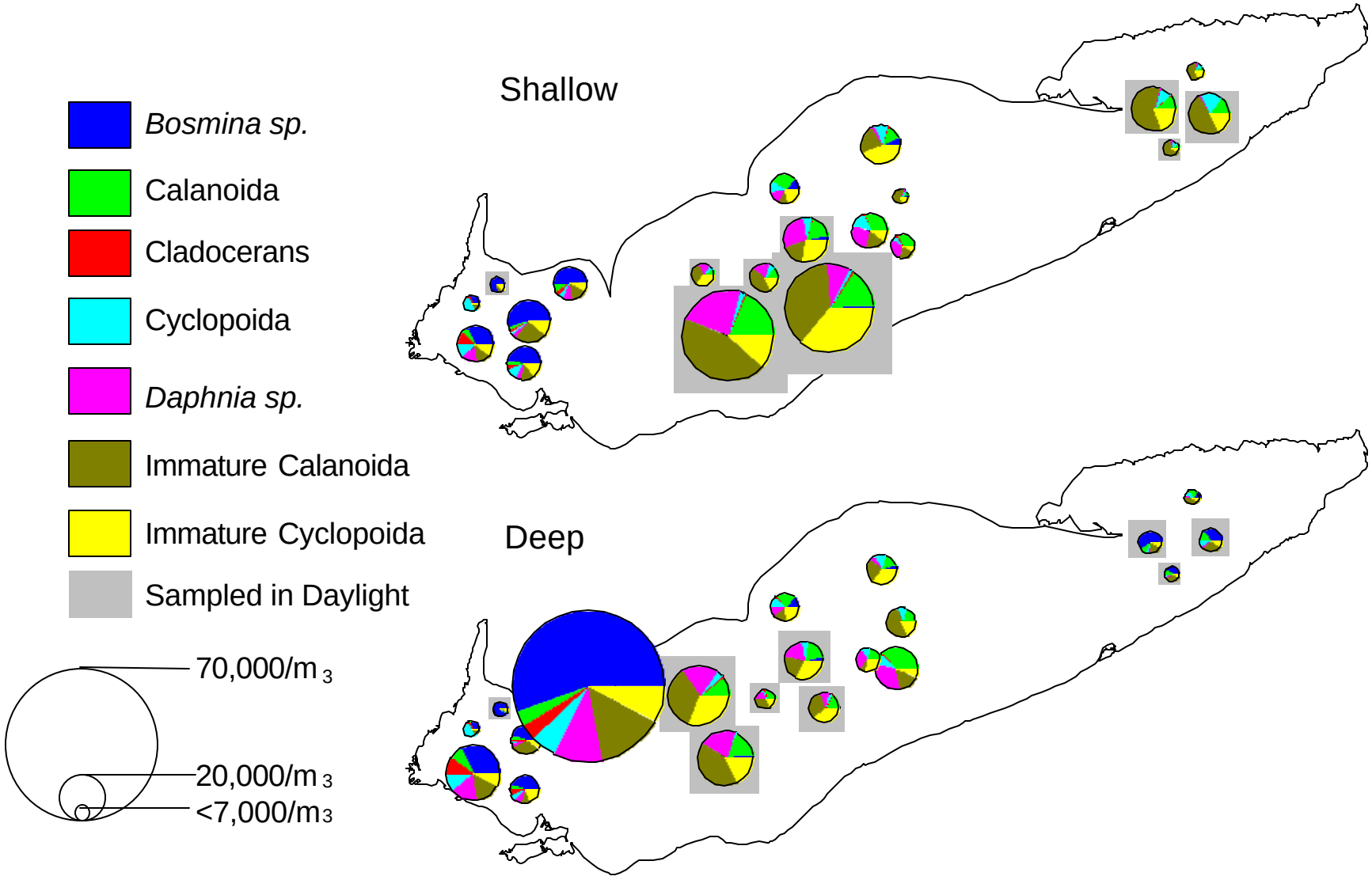

Figure 8. Average relative similarity between zooplankton communities from shallow and deep tows for tows taken at night and during the day. An * indicates a significant difference between day and night comparisons (a=0.05).

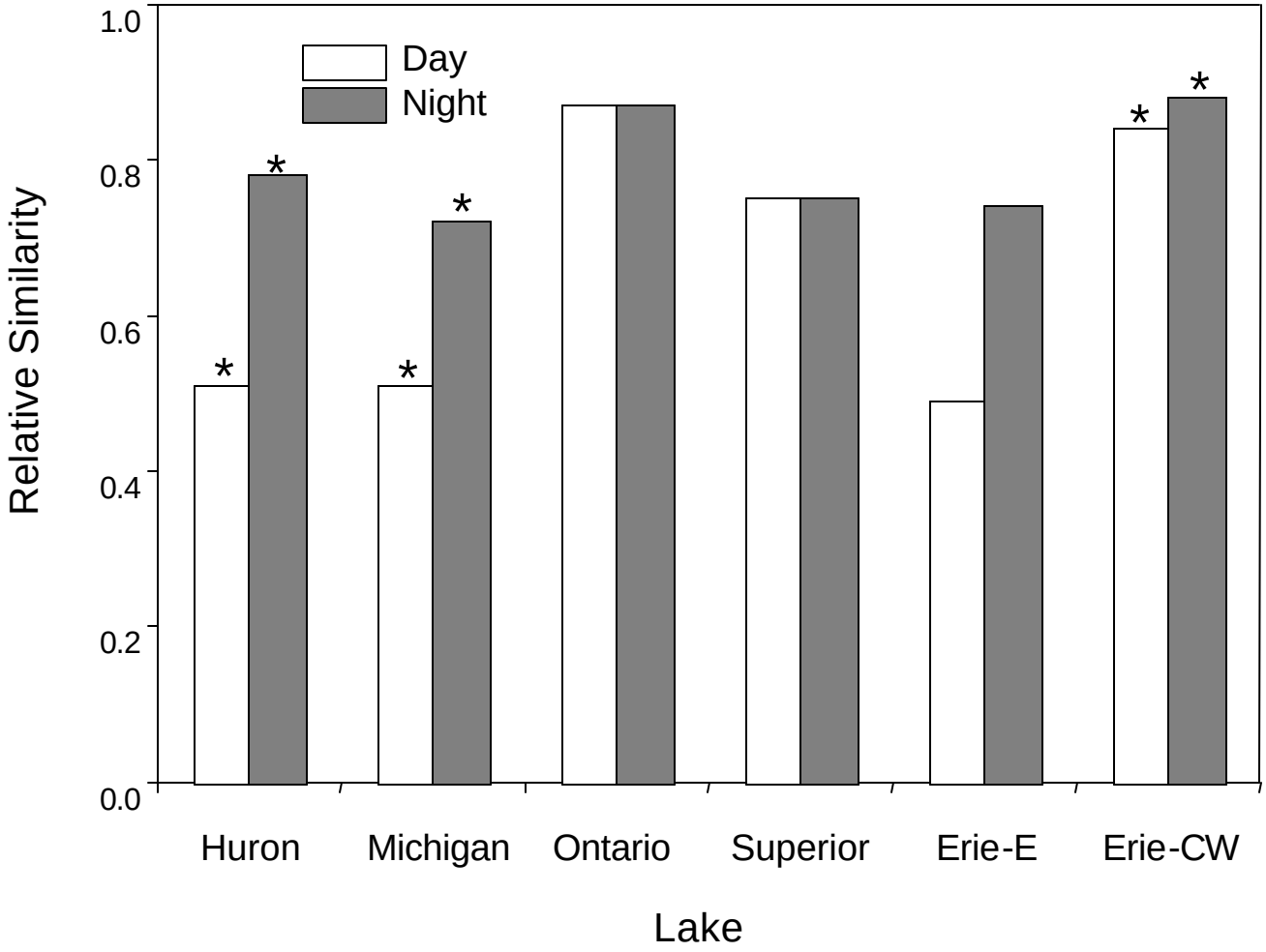

Figure 9. Box plots of *Bosmina longirostris* abundance for both shallow and deep tows taken during the day and during the night. The solid line in the box represents the median abundance while the top and bottom edges of the box are the 25th and 75th percentile values. The whiskers represent the 10th and 90th percentile values, and the solid black dots are outliers.

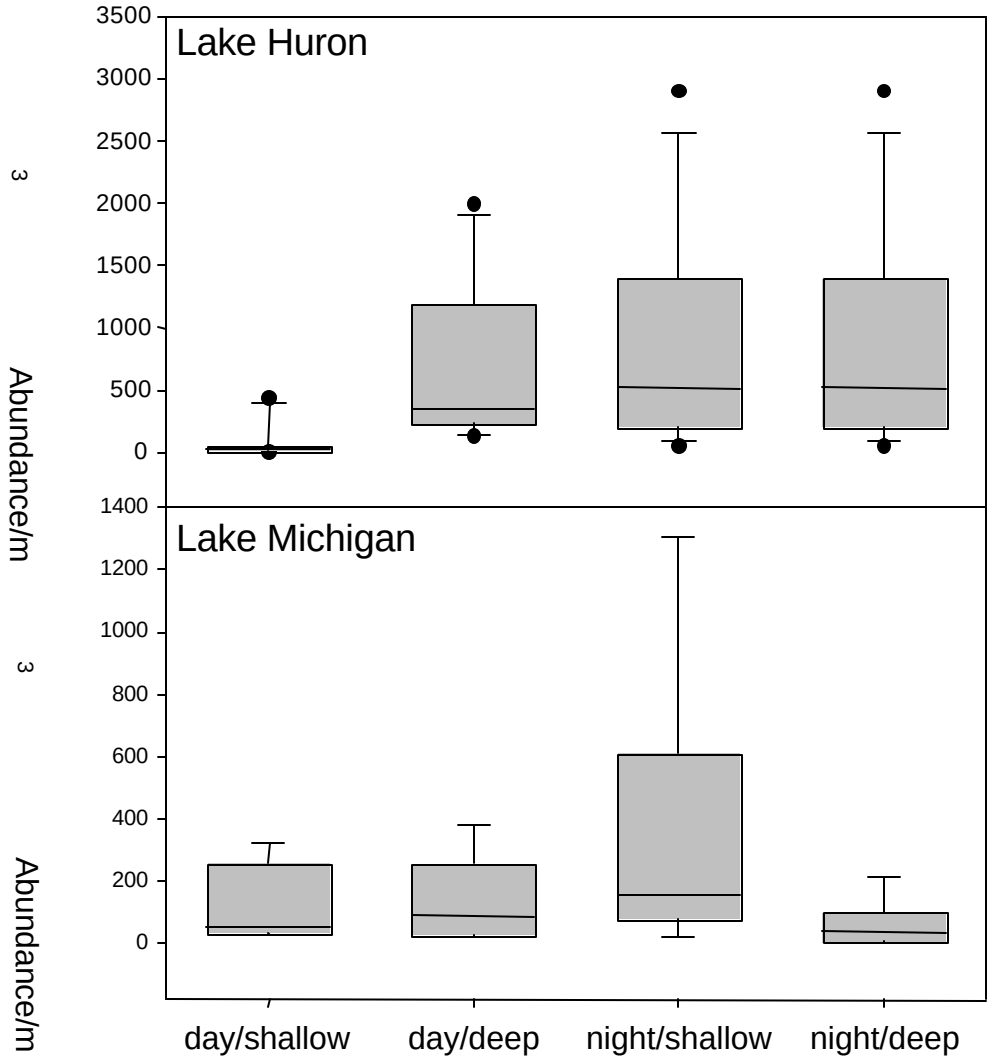

Figure 10. Box plot of *Eubosmina coregoni* abundance for both shallow and deep tows taken during the day and during the night. Box plot explanations follow Figure 9.

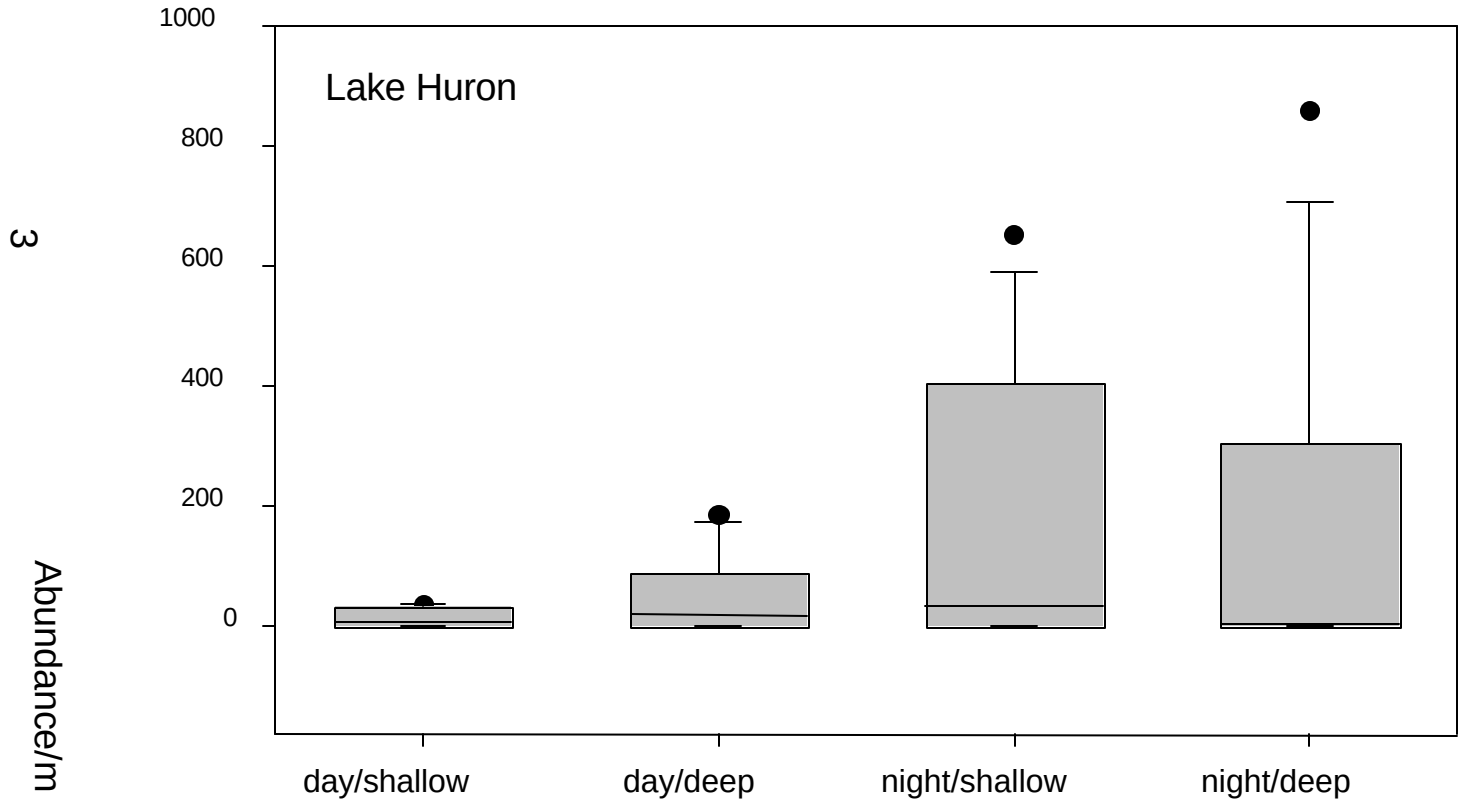

Figure 11. Box plot of *Holopedium gibberum* abundance for both shallow and deep tows taken during the day and during the night. Box plot explanations follow Figure 9.

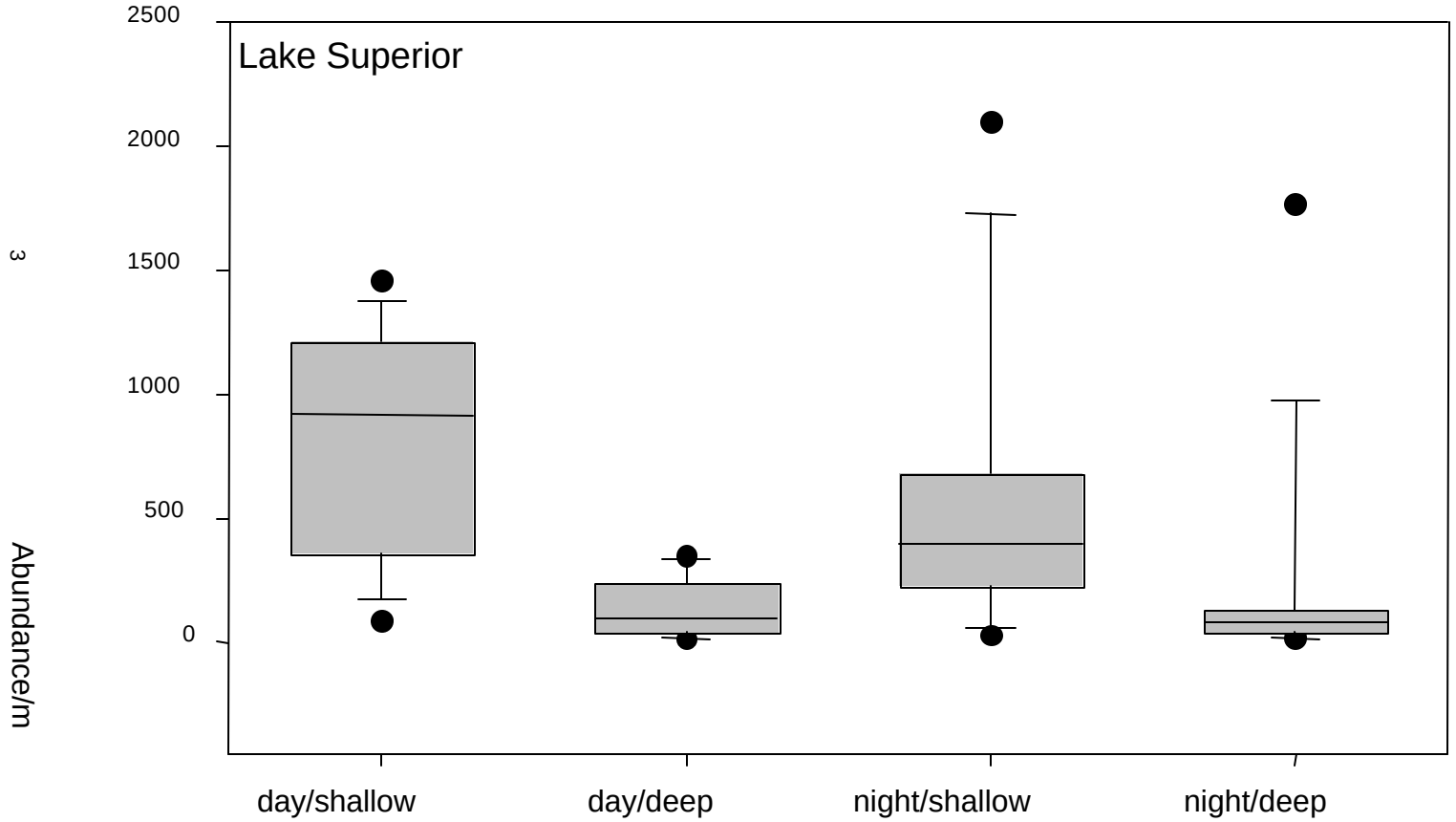

Figure 12. Box plots of *Daphnia galeata mendotae* abundance for both shallow and deep tows taken during the day and during the night. Box plot explanations follow Figure 9.

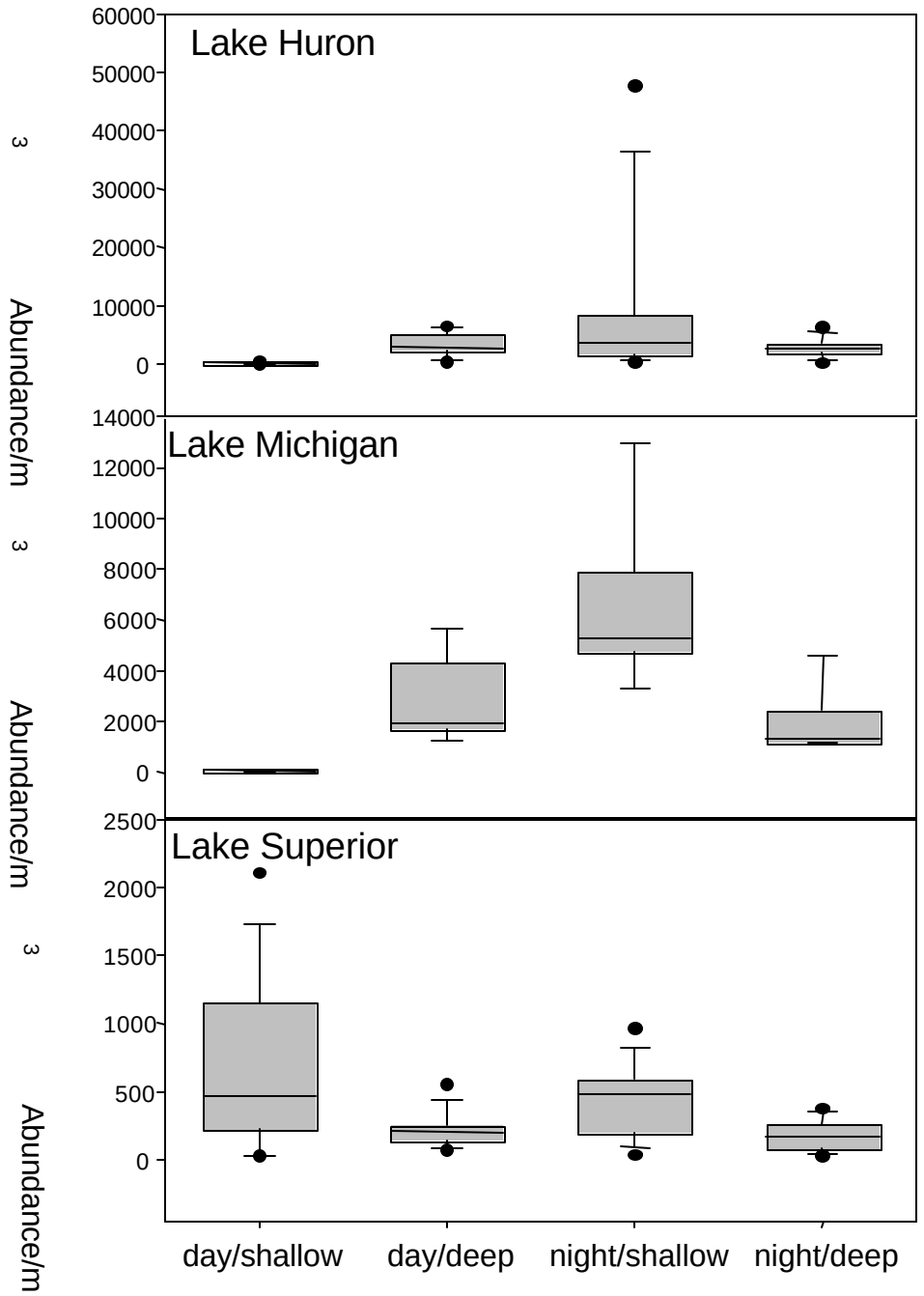

Figure 13. Box plots of *Bythotrephes cedarstroemi* abundance for both shallow and deep tows taken during the day and during the night. Box plot explanations follow Figure 9.

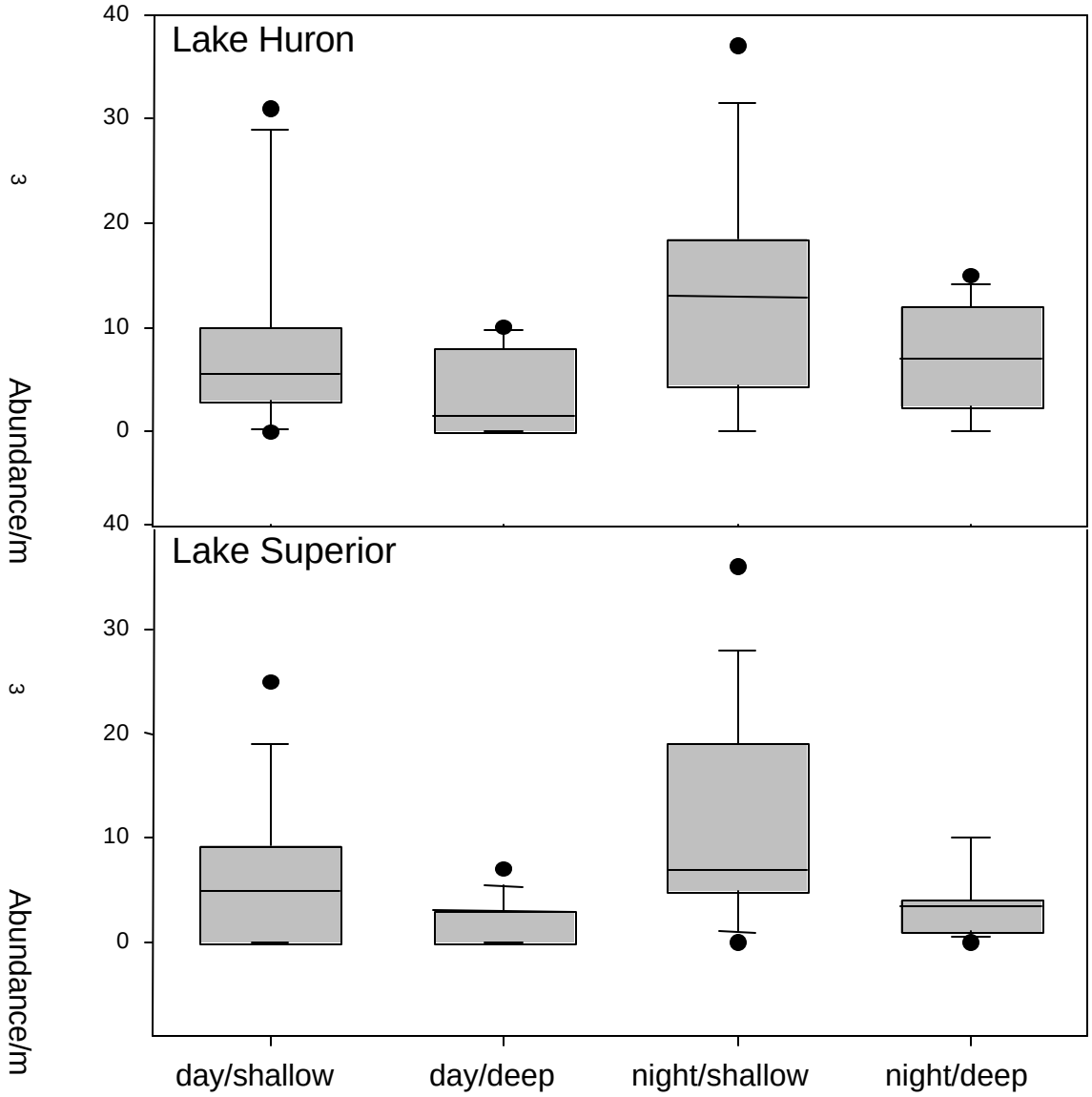

Figure 14. Box plots of *Tropocyclops prasinus mexicanus* abundance for both shallow and deep tows taken during the day and during the night. Box plot explanations follow Figure 9.

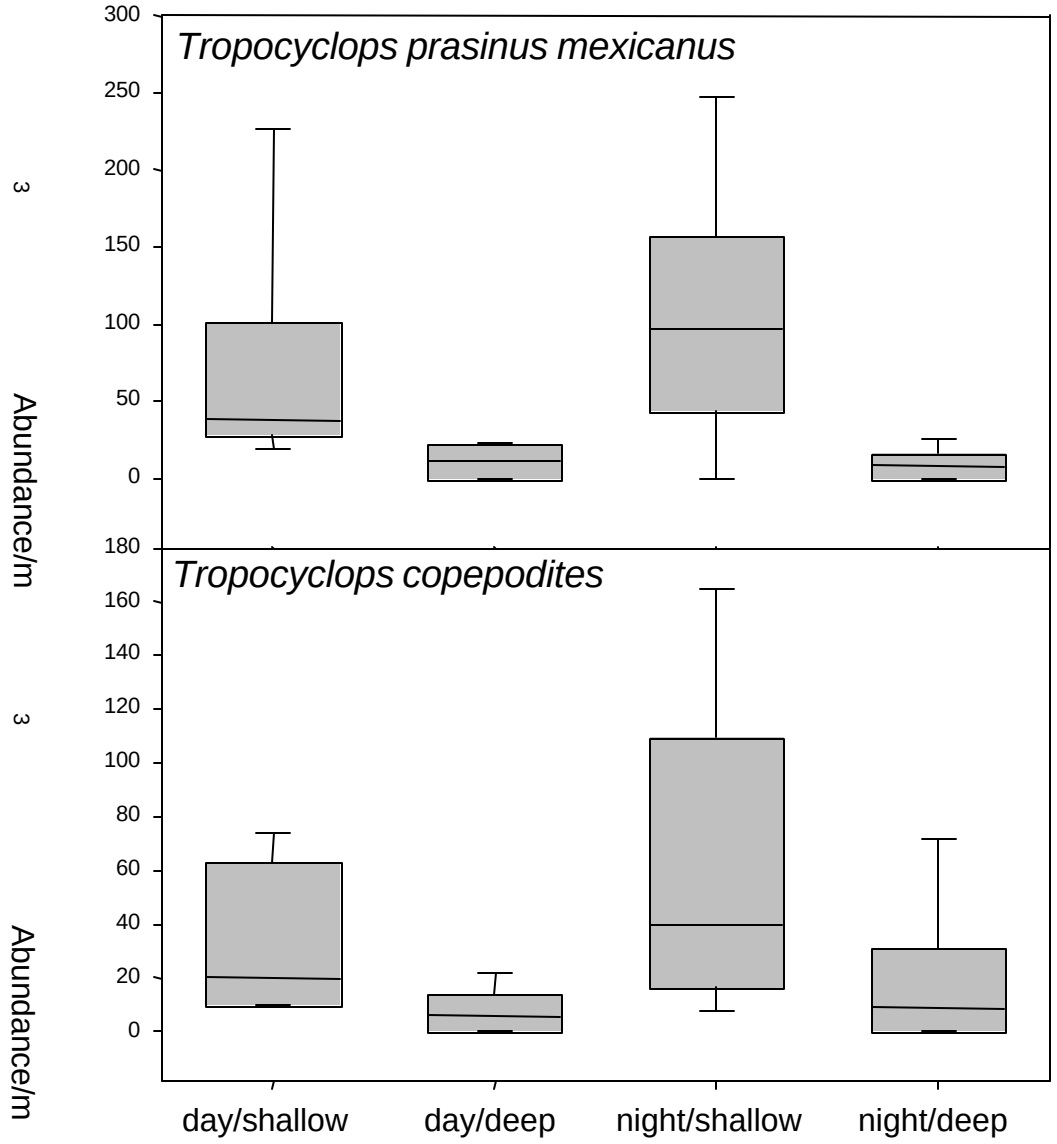

Figure 15. Box plots of *Diacyclops thomasi* and Cyclops copepodite abundance in Lake Michigan for both shallow and deep tows taken during the day and during the night. Box plot explanations follow Figure 9.

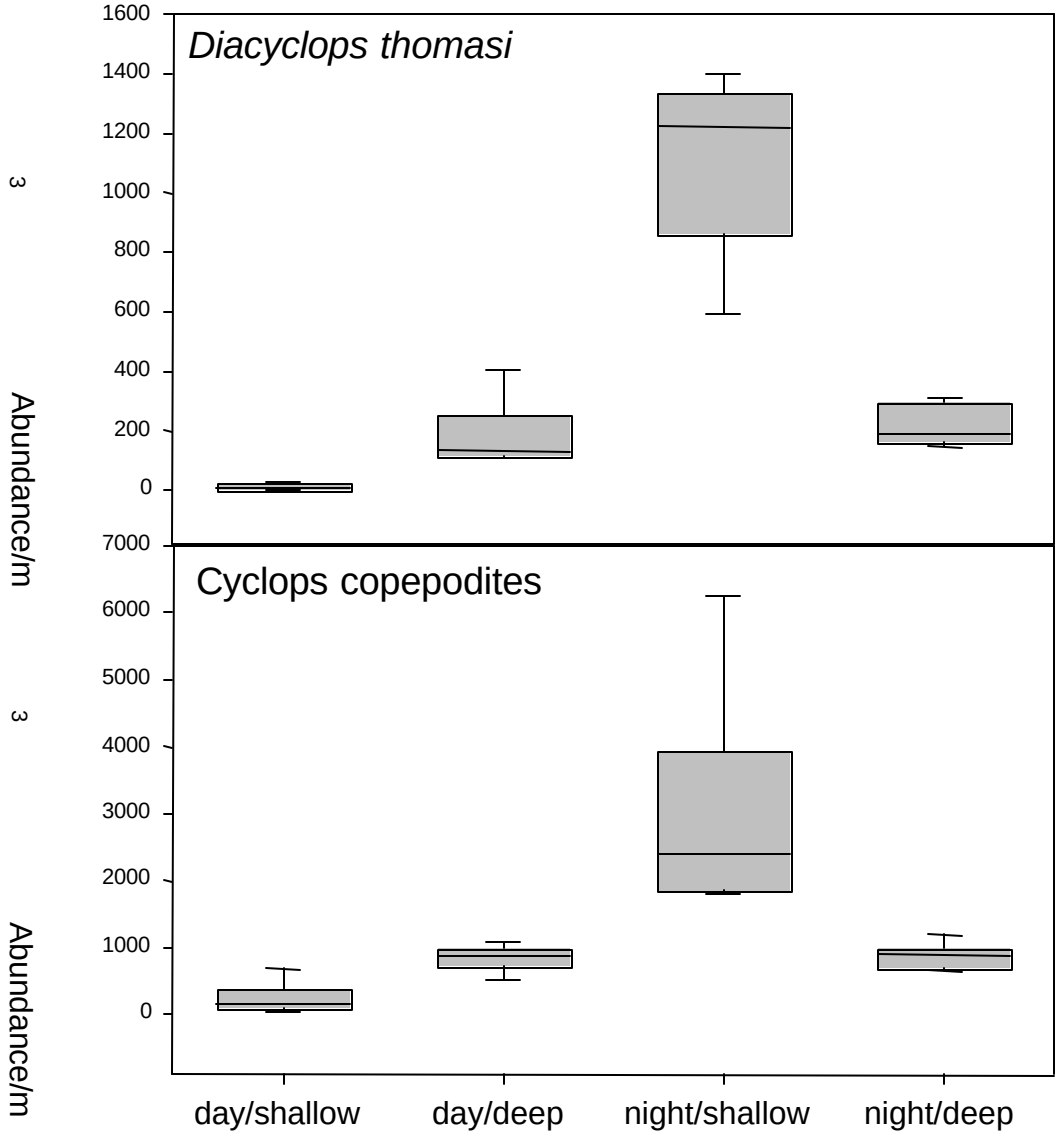

Figure 16. Box plots of *Diacyclops thomasi* and Cyclops copepodite abundance in Lake Superior for both shallow and deep tows taken during the day and during the night. Box plot explanations follow figure 9.

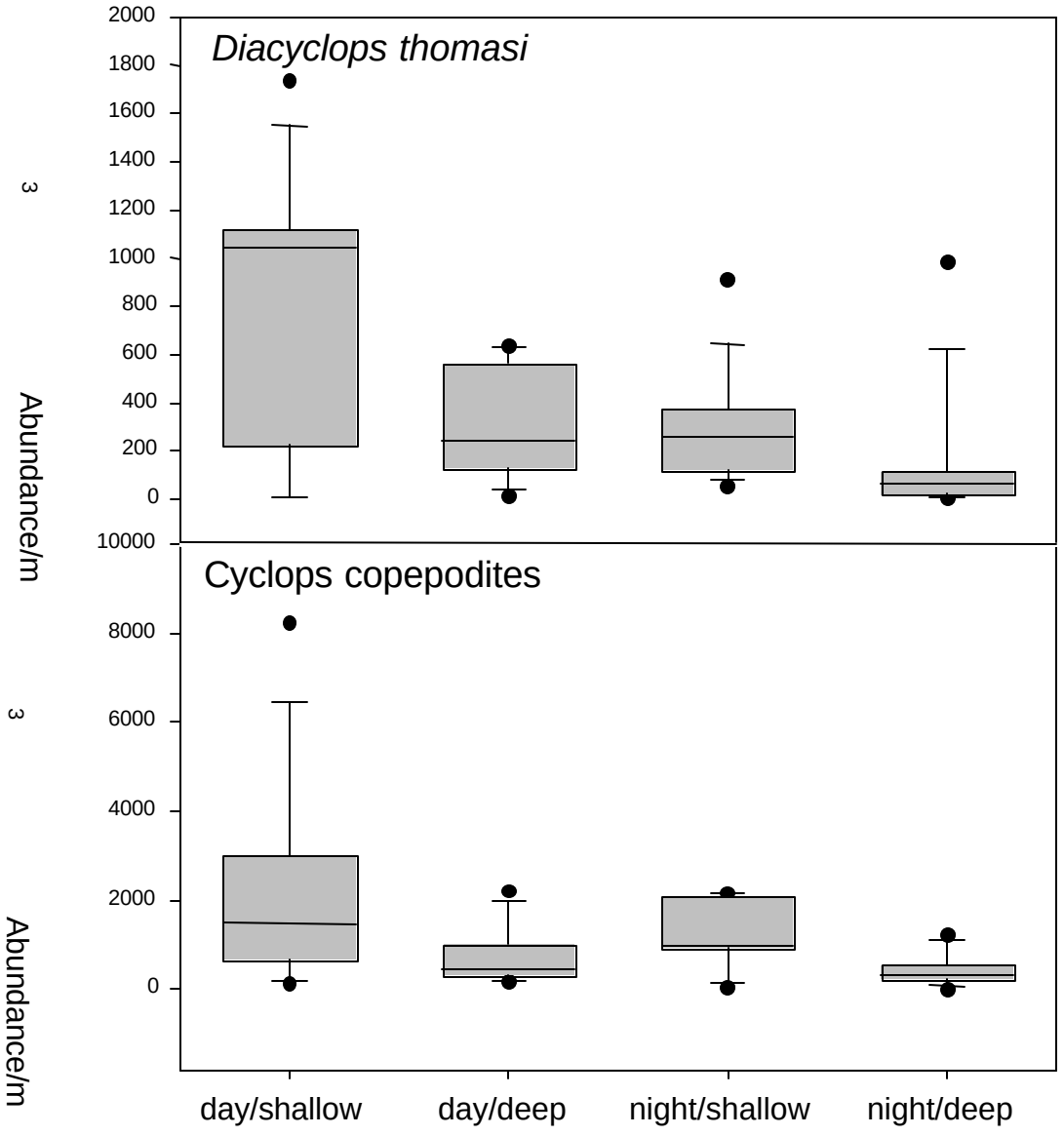

Figure 17. Box plots of *Diacyclops thomasi and C*yclops copepodite abundance in Lake Huron for both shallow and deep tows taken during the day and during the night. Box plot explanations follow Figure 9.

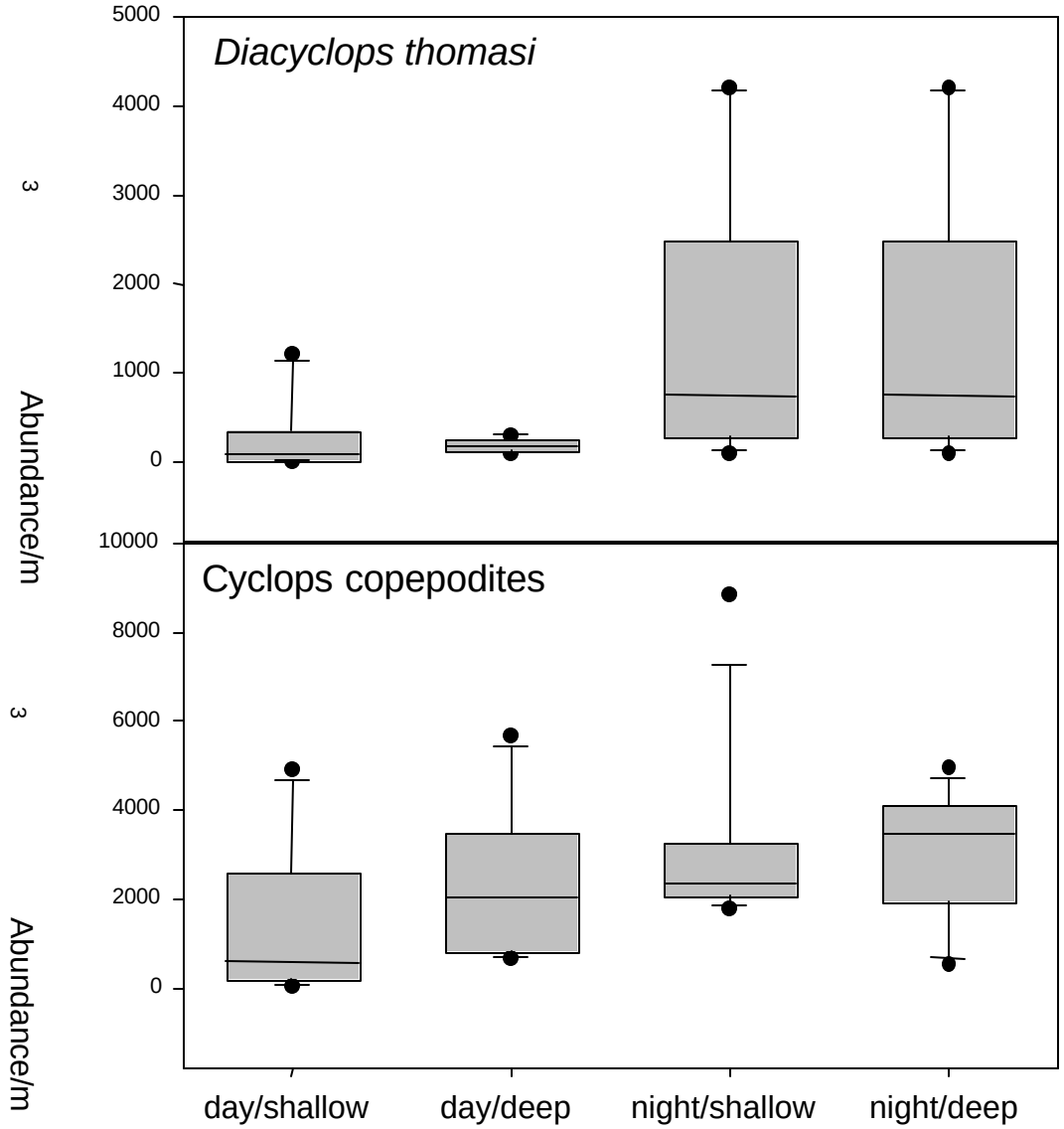

Figure 18. Box plots of Leptod *iaptomus ashlandi* abundance for both shallow and deep tows taken during the day and during the night. Box plot explanations follow Figure 9

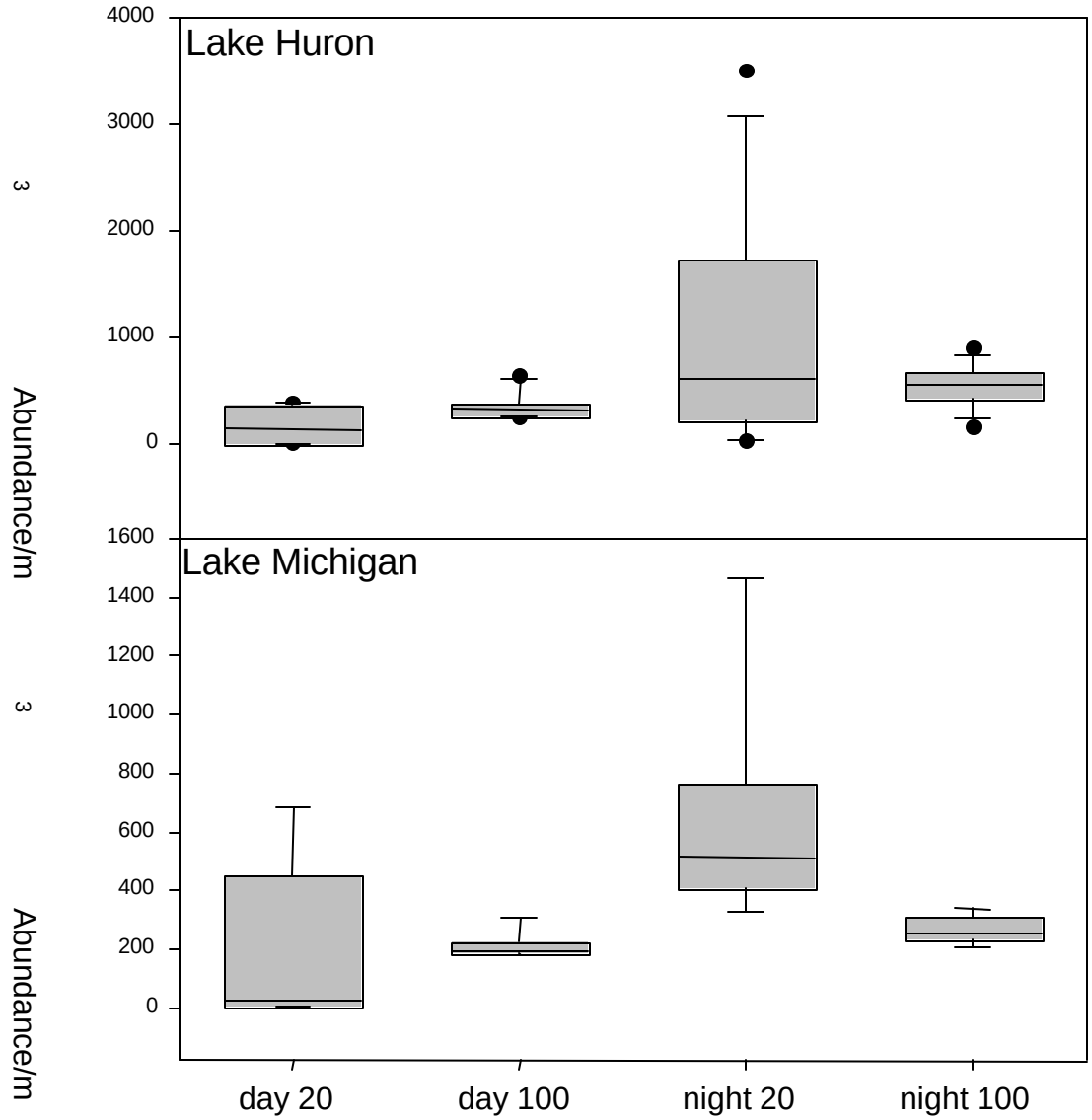

Figure 19. Box plots of *Leptodiaptomus minutus* abundance for both shallow and deep tows taken during the day and during the night. Box plot explanations follow figure 9.

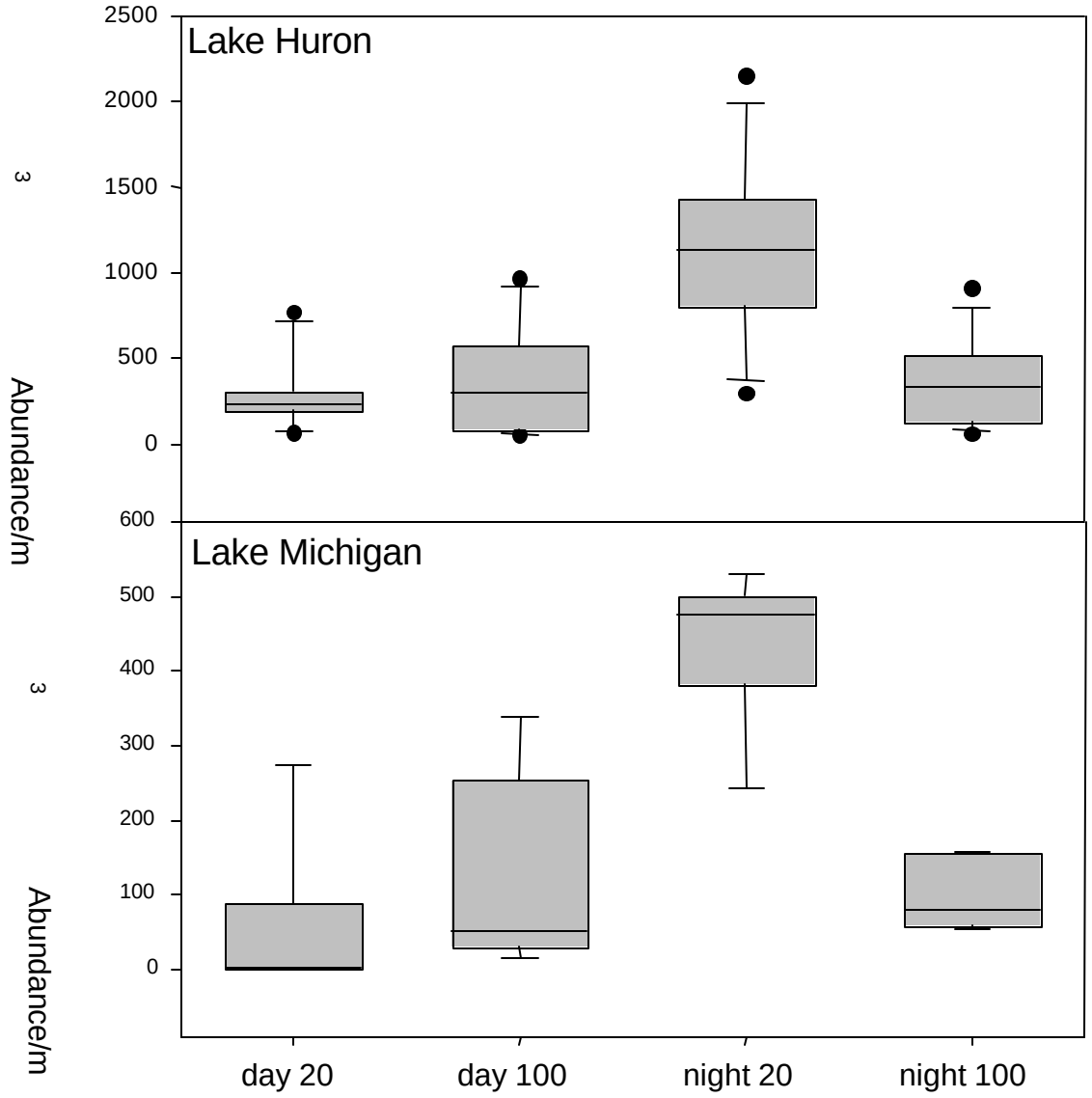

Figure 20. Box plot of *Skistodiaptomus oregonensis* abundance for both shallow and deep tows taken during the day and during the night. Box plot explanations follow Figure 9.

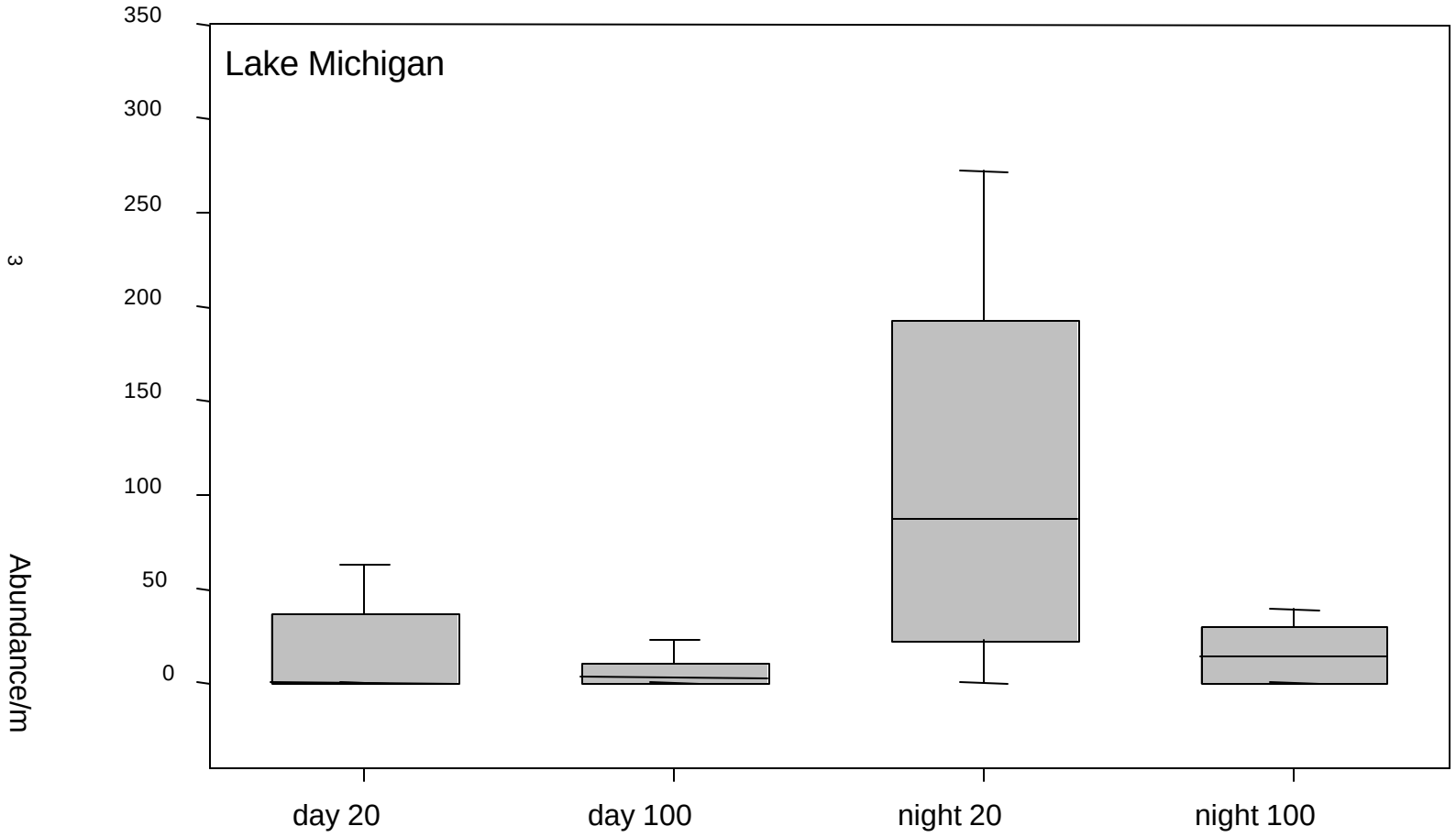

Figure 21. Box plots of abundance for both shallow and deep tows taken during the day and during the night. Box plot explanations follow Figure 9.

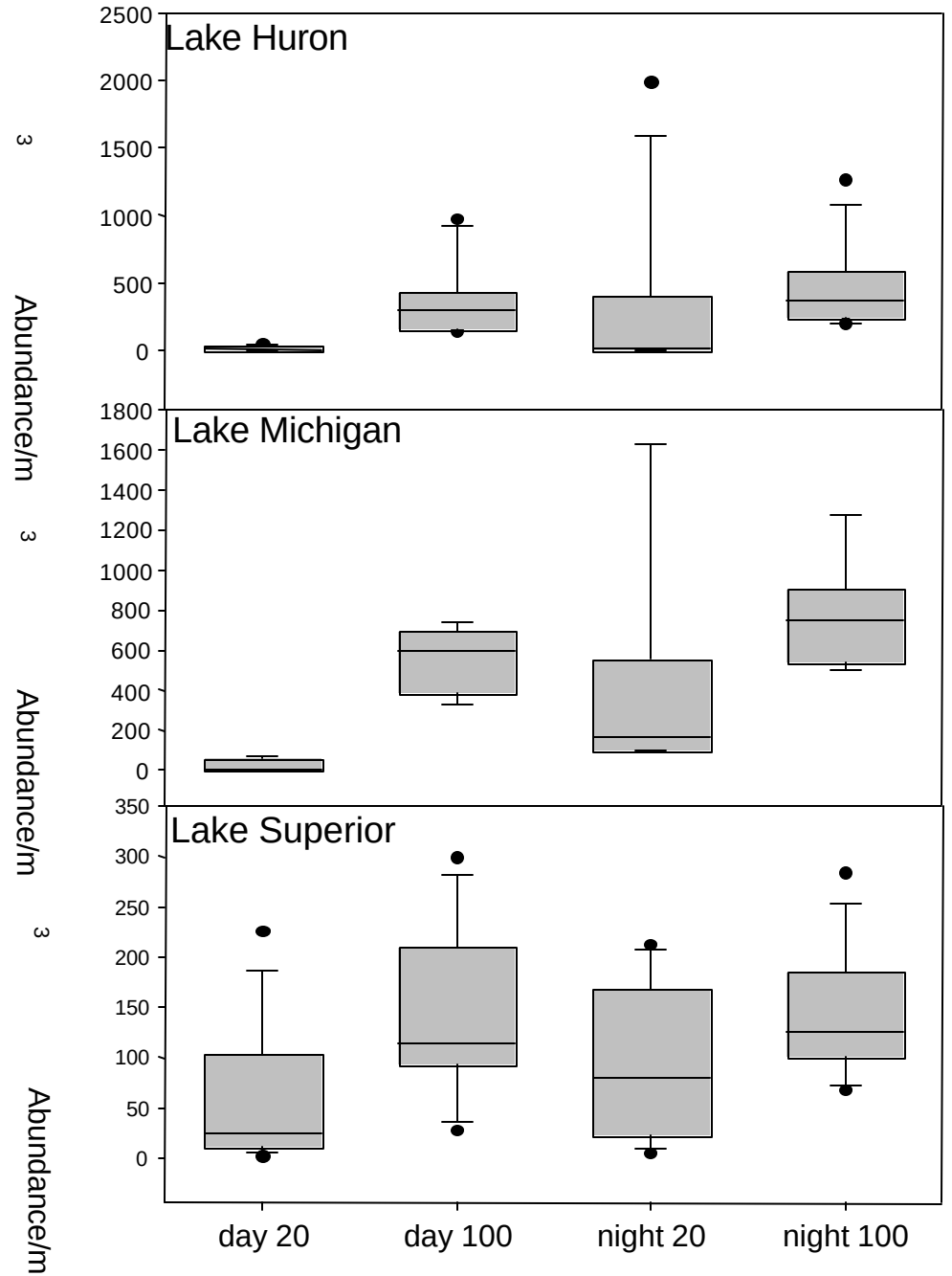

Figure 22. Relative abundance of *Leptodiaptomus sicilis*, as percent of total crustacean abundance at sites in Lakes Superior, Michigan and Huron, estimated by shallow and deep tows, Summer 1998.

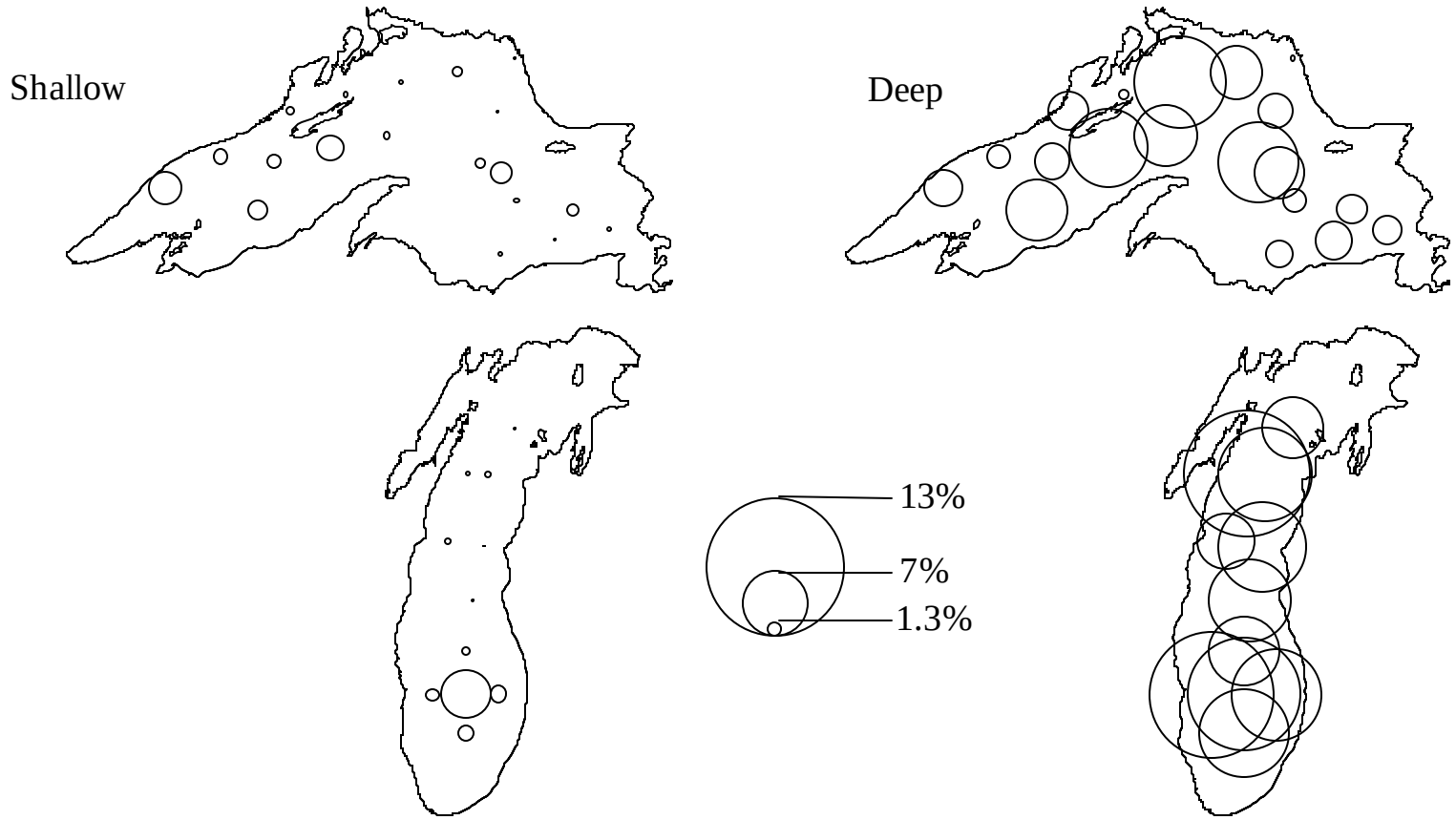

Figure 23. Box plots of Diaptomid copepodite abundance for both shallow and deep tows taken during the day and during the night. Box plot explanations follow Figure 9.

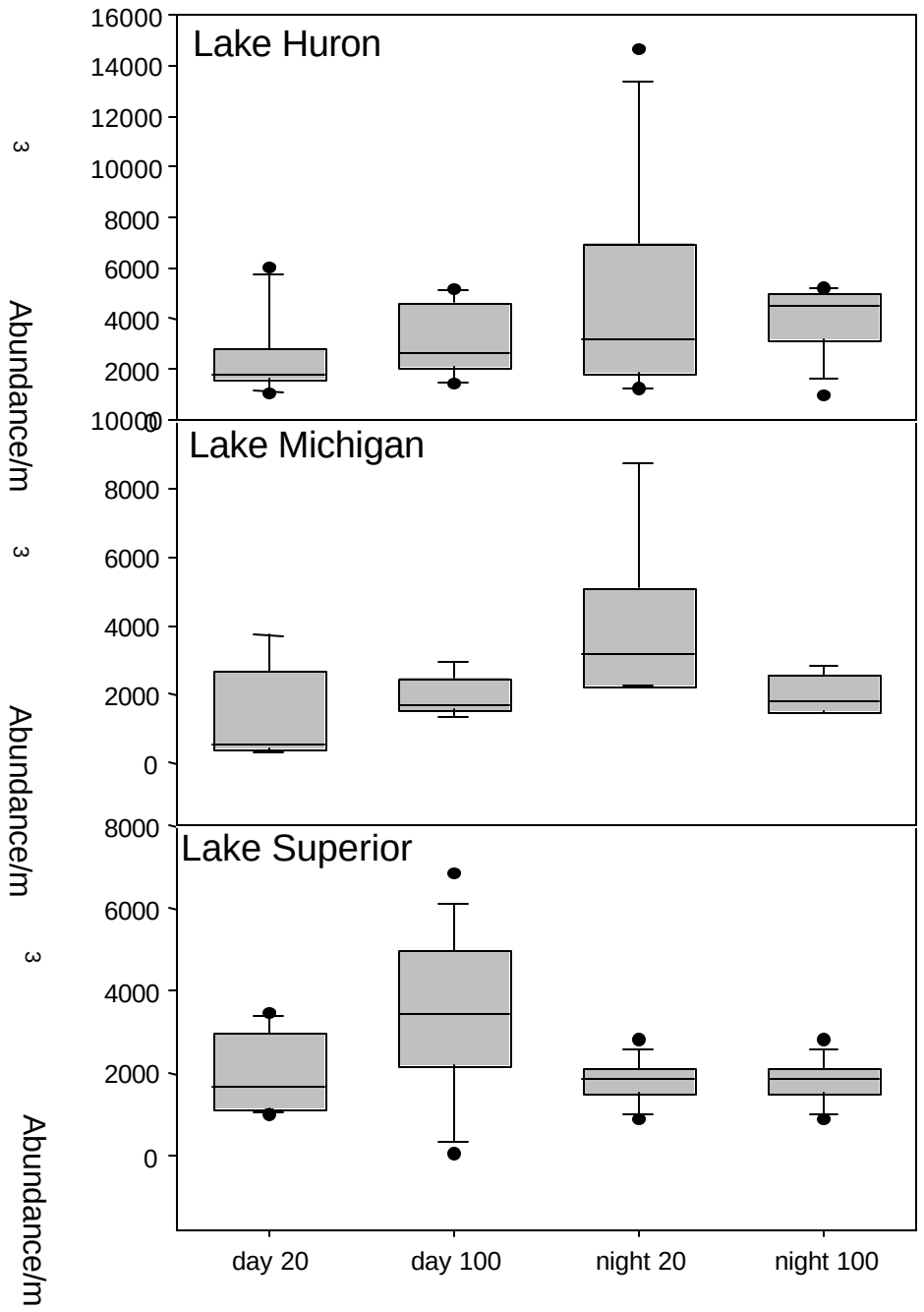

Figure 24. Relative abundance of *Limnocalanus macrurus*, as percent of total crustacean abundance at sites in Lakes Superior, Michigan and Huron, estimated by shallow and deep tows, Summer 1998.

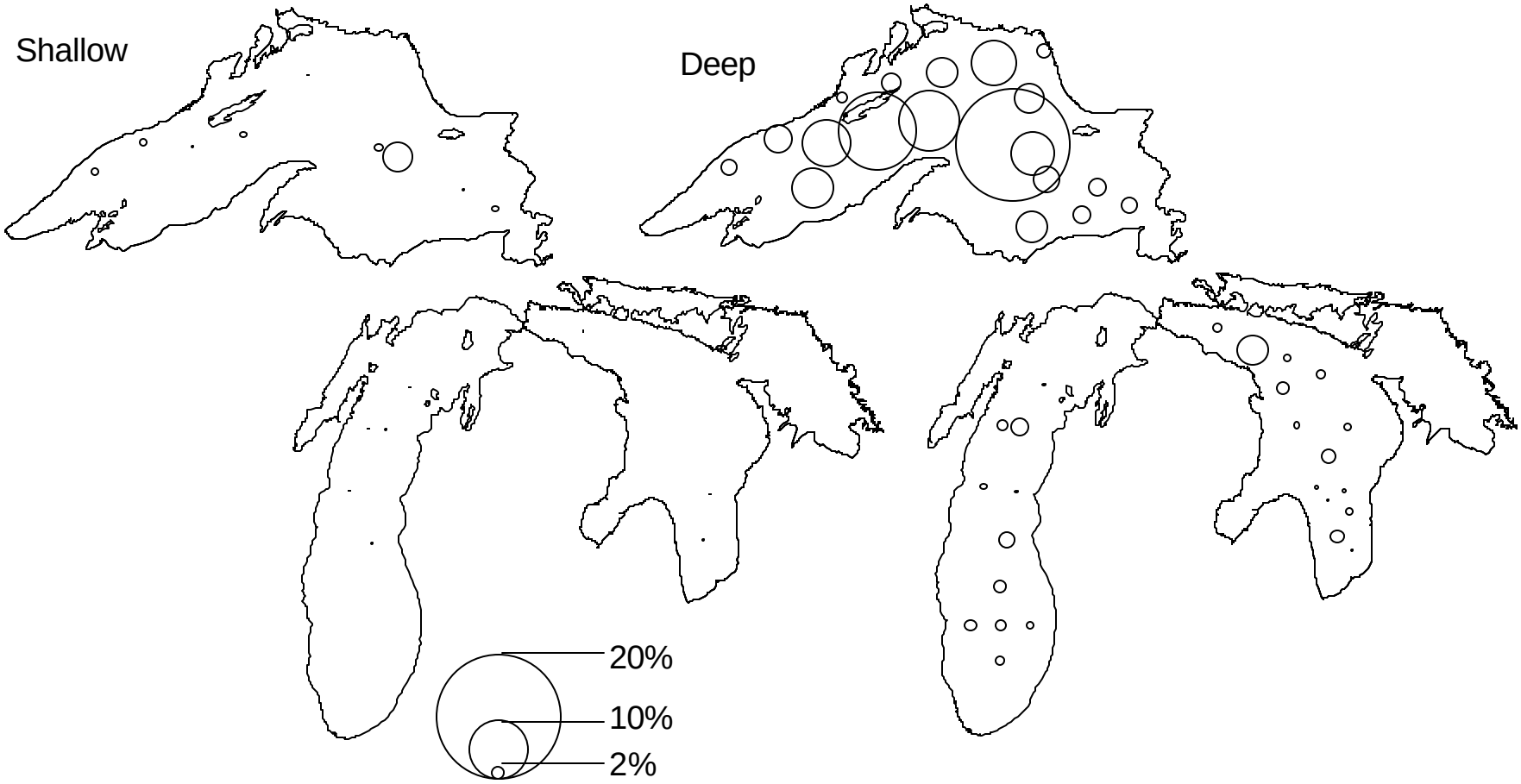

Figure 25. Box plots of *Limnocalanus macrurus* abundance for both shallow and deep tows taken during the day and during the night. Box plot explanations follow Figure 9.

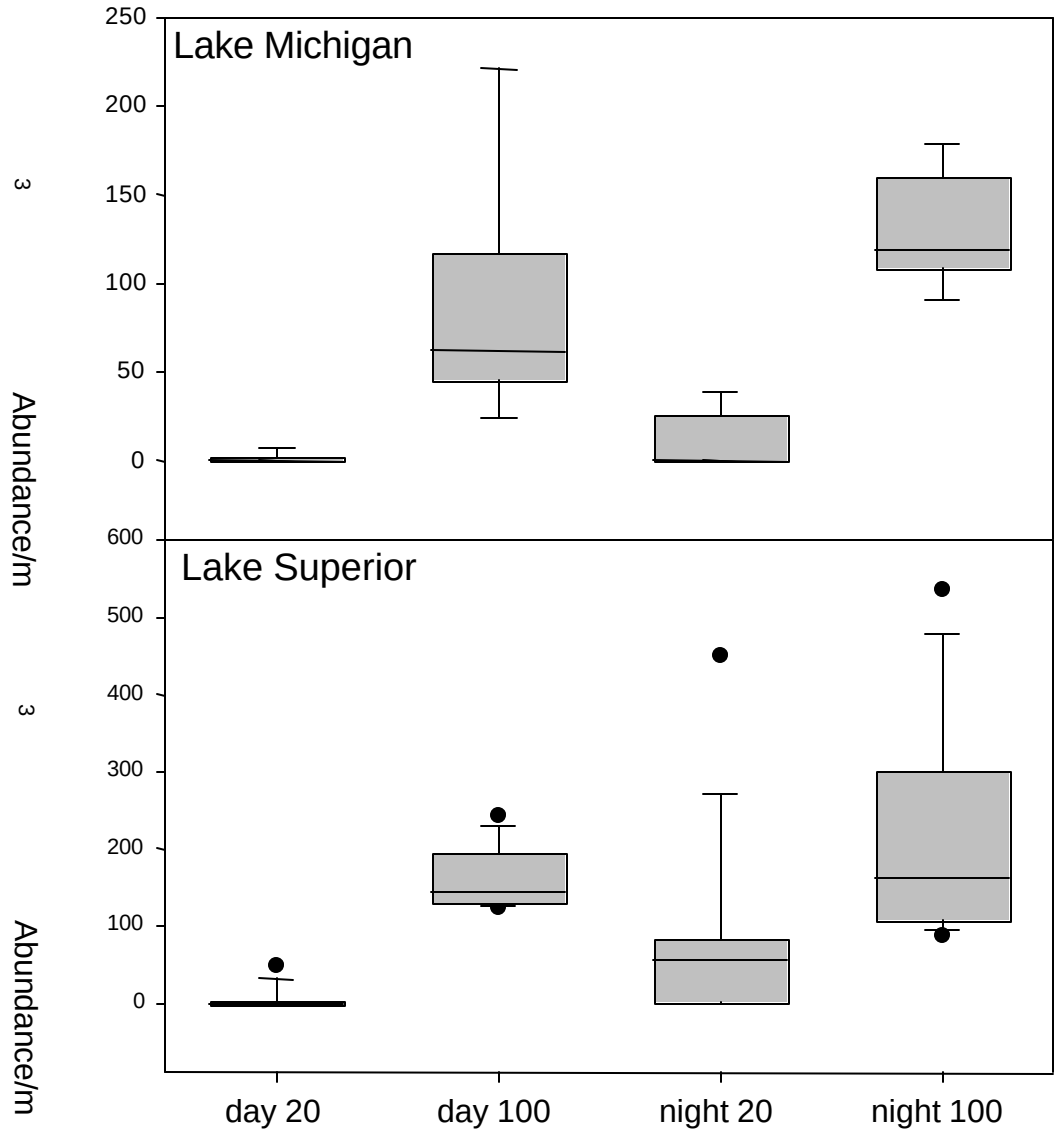

Figure 26. Box plots of *Senecella calanoides* abundance for both shallow and deep tows taken during the day and during the night. Box plot explanations follow Figure 9.

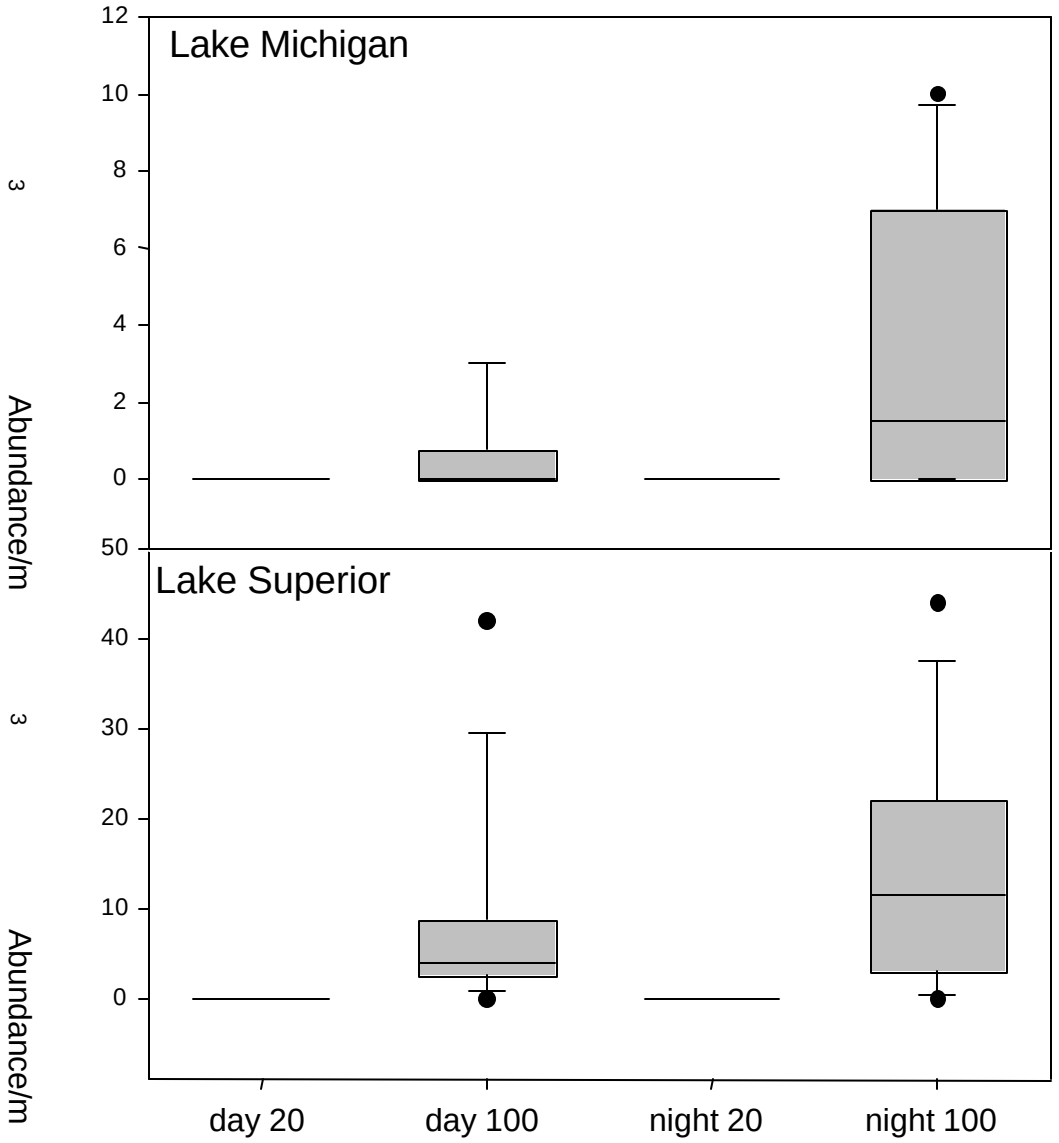

Figure 27. Relative abundance of *Senecella calanoides*, as percent of total crustacean abundance, at sites in Lakes Superior and Michigan, estimated by shallow and deep tows, Summer 1998.

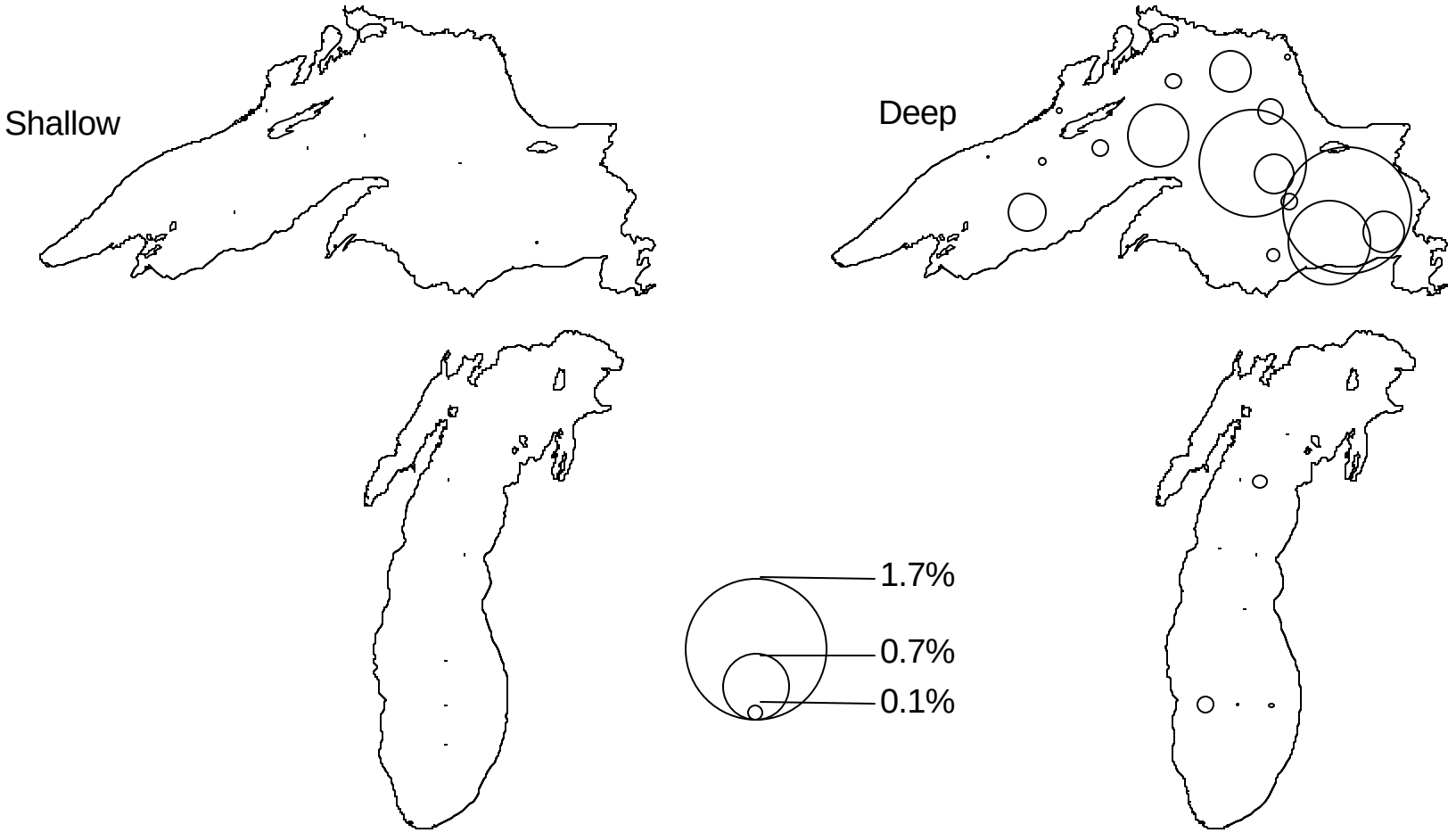

Figure 28. Box plots of *Epischura lacustris* abundance for both shallow and deep tows taken during the day and during the night. Box plot explanations follow figure 9.

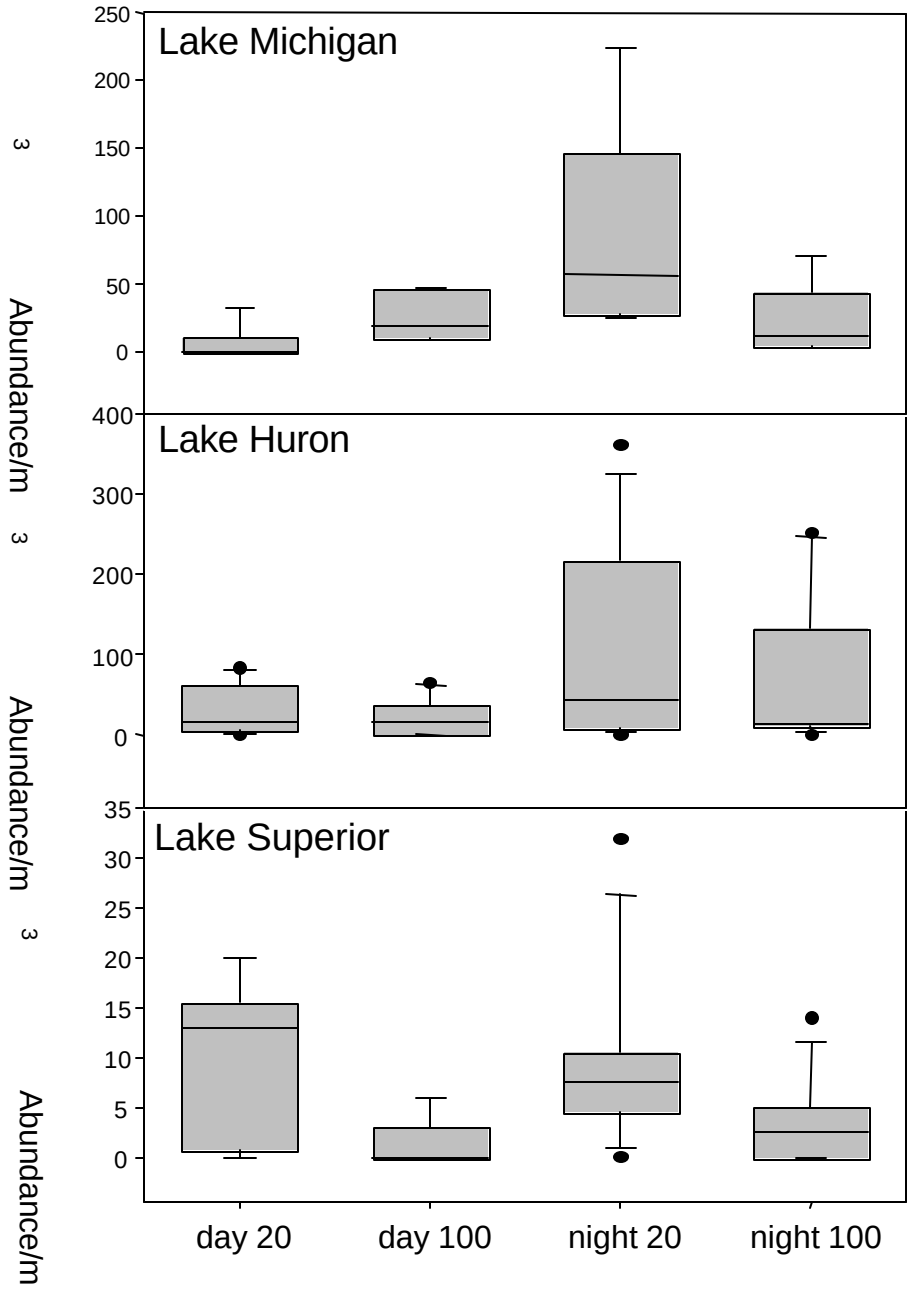

Figure 29. Box plots of *Epischura copepodites*, abundance for both shallow and deep tows taken during the day and during the night. Box plot explanations follow Figure 9.

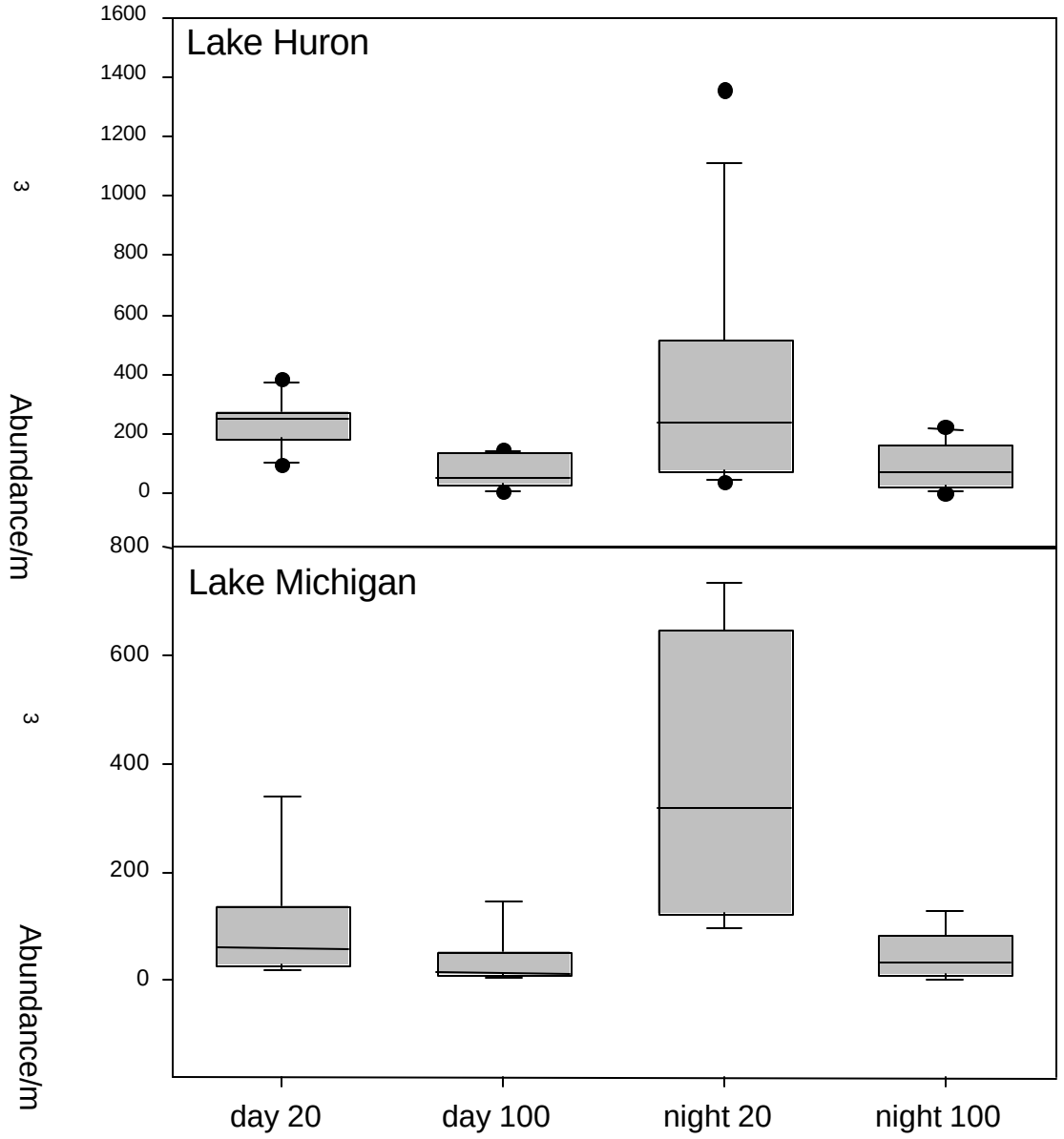

Figure 30. Percent abundance of *Bosmina longirostris* in shallow and deep tows taken during the day